



CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
SEQUENCE LISTING

- <110> Genentech, Inc.
Ashkenazi, Avi
Botstein, David
Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William, I.
- <120> Secreted and Transmembrane Polypeptides and Nucleic
Acids Encoding the Same
- <130> 10466-14
- <140> 09/665,350
<141> 2000-09-18
- <150> PCT/US00/04414
<151> 2000-02-22
- <150> US 60/143,048
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- <150> US 60/145,698
<151> 1999-07-26
- <150> US 60/146,222
<151> 1999-07-28
- <150> PCT/US99/20594
<151> 1999-09-08
- <150> PCT/US99/20944
<151> 1999-09-13
- <150> PCT/US99/21090
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- <150> PCT/US99/21547
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- <150> PCT/US99/23089
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<151> 2000-01-05

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<212> DNA
<213> Homo sapiens

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<211> 353
<212> PRT
<213> Homo sapiens

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35 40 45
Ala Lys Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Thr
50 55 60
Leu Ser Lys Tyr Glu Ser Ser Glu Ile Arg Leu Leu Glu Ile Leu Glu
65 70 75 80
Gly Leu Cys Glu Ser Ser Asp Phe Glu Cys Asn Gln Met Leu Glu Ala
85 90 95
Gln Glu Glu His Leu Glu Ala Trp Trp Leu Gln Leu Lys Ser Glu Tyr
100 105 110
Pro Asp Leu Phe Glu Trp Phe Cys Val Lys Thr Leu Lys Val Cys Cys
115 120 125
Ser Pro Gly Thr Tyr Gly Pro Asp Cys Leu Ala Cys Gln Gly Gly Ser
130 135 140
Gln Arg Pro Cys Ser Gly Asn Gly His Cys Ser Gly Asp Gly Ser Arg
145 150 155 160
Gln Gly Asp Gly Ser Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu
165 170 175
Cys Thr Asp Cys Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr
180 185 190
His Ser Ile Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly
195 200 205
Leu Thr Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp
210 215 220
Glu Gly Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro Pro
225 230 235 240
Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr Cys
245 250 255
Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly Pro Gly
260 265 270
Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His Gly Gln Cys
275 280 285
Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys

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290

295

300

Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro
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Glu Ala Thr Glu Gly Glu Ser Pro Thr Gln Leu Pro Ser Arg Glu Asp
 340 345 350

Leu

<210> 3

<211> 2206

<212> DNA

<213> Homo sapiens

<400> 3

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ggtgcggcac	gaggagtttt	cccggcagcg	aggaggtcct	gagcagcatg	gcccggagga	240
gcgccttccc	tgccgccgcg	ctctggctct	ggagcatcct	cctgtgcctg	ctggcactgc	300
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caagagtact	cataggatth	gaagaagata	tcctgattgt	ttcagagggg	aaaatggcac	420
cttttacaca	tgatttcaga	aaagcgcaac	agagaatgcc	agctattcct	gtcaatatcc	480
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<210> 4

<211> 379

<212> PRT

<213> Homo sapiens

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35 40 45
Ile Gly Phe Glu Glu Asp Ile Leu Ile Val Ser Glu Gly Lys Met Ala
50 55 60
Pro Phe Thr His Asp Phe Arg Lys Ala Gln Gln Arg Met Pro Ala Ile
65 70 75 80
Pro Val Asn Ile His Ser Met Asn Phe Thr Trp Gln Ala Ala Gly Gln
85 90 95
Ala Glu Tyr Phe Tyr Glu Phe Leu Ser Leu Arg Ser Leu Asp Lys Gly
100 105 110
Ile Met Ala Asp Pro Thr Val Asn Val Pro Leu Leu Gly Thr Val Pro
115 120 125
His Lys Ala Ser Val Val Gln Val Gly Phe Pro Cys Leu Gly Lys Gln
130 135 140
Asp Gly Val Ala Ala Phe Glu Val Asp Val Ile Val Met Asn Ser Glu
145 150 155 160
Gly Asn Thr Ile Leu Gln Thr Pro Gln Asn Ala Ile Phe Phe Lys Thr
165 170 175
Cys Gln Gln Ala Glu Cys Pro Gly Gly Cys Arg Asn Gly Gly Phe Cys
180 185 190
Asn Glu Arg Arg Ile Cys Glu Cys Pro Asp Gly Phe His Gly Pro His
195 200 205
Cys Glu Lys Ala Leu Cys Thr Pro Arg Cys Met Asn Gly Gly Leu Cys
210 215 220
Val Thr Pro Gly Phe Cys Ile Cys Pro Pro Gly Phe Tyr Gly Val Asn
225 230 235 240
Cys Asp Lys Ala Asn Cys Ser Thr Thr Cys Phe Asn Gly Gly Thr Cys
245 250 255
Phe Tyr Pro Gly Lys Cys Ile Cys Pro Pro Gly Leu Glu Gly Glu Gln
260 265 270
Cys Glu Ile Ser Lys Cys Pro Gln Pro Cys Arg Asn Gly Gly Lys Cys
275 280 285
Ile Gly Lys Ser Lys Cys Lys Cys Ser Lys Gly Tyr Gln Gly Asp Leu
290 295 300
Cys Ser Lys Pro Val Cys Glu Pro Gly Cys Gly Ala His Gly Thr Cys
305 310 315 320
His Glu Pro Asn Lys Cys Gln Cys Gln Glu Gly Trp His Gly Arg His
325 330 335

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Cys Asn Lys Arg Tyr Glu Ala Ser Leu Ile His Ala Leu Arg Pro Ala
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Gly Ala Gln Leu Arg Gln His Thr Pro Ser Leu Lys Lys Ala Glu Glu
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Arg Arg Asp Pro Pro Glu Ser Asn Tyr Ile Trp
370 375

<210> 5

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 5

agggagcacg gacagtgtgc agatgtggac gagtgtcac tagca

45

<210> 6

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 6

agagtgtatc tctggctacg c

21

<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 7

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22

<210> 8

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 8

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<210> 9

<211> 22

<212> DNA

<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 9

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<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

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<210> 11

<211> 2197

<212> DNA

<213> Homo sapiens

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<210> 12
 <211> 164
 <212> PRT
 <213> Homo sapiens

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 Pro Gly Leu His Leu Arg Gly Ile Arg Asp Ala Gly Gly Arg Tyr Cys
 35 40 45
 Gln Glu Gln Asp Leu Cys Cys Arg Gly Arg Ala Asp Asp Cys Ala Leu
 50 55 60
 Pro Tyr Leu Gly Ala Ile Cys Tyr Cys Asp Leu Phe Cys Asn Arg Thr
 65 70 75 80
 Val Ser Asp Cys Cys Pro Asp Phe Trp Asp Phe Cys Leu Gly Val Pro
 85 90 95
 Pro Pro Phe Pro Pro Ile Gln Gly Cys Met His Gly Gly Arg Ile Tyr
 100 105 110
 Pro Val Leu Gly Thr Tyr Trp Asp Asn Cys Asn Arg Cys Thr Cys Gln
 115 120 125
 Glu Asn Arg Gln Trp His Gly Gly Ser Arg His Asp Gln Ser His Gln
 130 135 140
 Pro Gly Gln Leu Trp Leu Ala Gly Trp Glu Pro Gln Arg Leu Leu Gly
 145 150 155 160
 His Asp Pro Gly

<210> 13
 <211> 533
 <212> DNA
 <213> Homo sapiens

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 <222> (33)..(33)
 <223> a, t, c or g

<220>
 <221> modified_base
 <222> (37)..(37)
 <223> a, t, c or g

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 <223> a, t, c or g

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 <221> modified_base
 <222> (94)..(94)
 <223> a, t, c or g

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>
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 <222> (144)..(144)
 <223> a, t, c or g

<220>
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 <223> a, t, c or g

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 ccgagggntg gtgtctgacc actgctaccc cttctcgggc cgtgaacgag acgaggctgg 240
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 ccgcctcggc tccaacgaca aggagatcat gaaggagctg atggagaatg gccctgtcca 420
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<210> 14
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 14
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<210> 15
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 15
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<210> 16
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 16
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<210> 17
 <211> 960
 <212> DNA
 <213> Homo sapiens

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<210> 18

<211> 189

<212> PRT

<213> Homo sapiens

<400> 18

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Pro Pro Ser Leu Arg Cys Ser Leu His Ser Ala Cys Cys Ser Gly Asp
          35          40          45

Pro Ala Ser Tyr Arg Leu Trp Gly Ala Pro Leu Gln Pro Thr Leu Gly
          50          55          60

Val Val Pro Gln Ala Ser Val Pro Leu Leu Thr Asp Leu Ala Gln Trp
          65          70          75          80

Glu Pro Val Leu Val Pro Glu Ala His Pro Asn Ala Ser Leu Thr Met
          85          90          95

Tyr Val Cys Thr Pro Val Pro His Pro Asp Pro Pro Met Ala Leu Ser
          100          105          110

Arg Thr Pro Thr Arg Gln Ile Ser Ser Ser Asp Thr Asp Pro Pro Ala
          115          120          125

Asp Gly Pro Ser Asn Pro Leu Cys Cys Cys Phe His Gly Pro Ala Phe
          130          135          140

Ser Thr Leu Asn Pro Val Leu Arg His Leu Phe Pro Gln Glu Ala Phe
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Pro Ala His Pro Ile Tyr Asp Leu Ser Gln Val Trp Ser Val Val Ser
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Pro Ala Pro Ser Arg Gly Gln Ala Leu Arg Arg Ala Gln
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<210> 19

<211> 24

<212> DNA

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 19

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24

<210> 20

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 20

tgcacaagtc ggtgtcacag cacg

24

<210> 21

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 21

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44

<210> 22

<211> 1200

<212> DNA

<213> Homo sapiens

<400> 22

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<210> 23

<211> 205

<212> PRT

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<213> Homo sapiens

<400> 23

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 35 40 45
 Arg Thr Ser Gly Lys His Val Gln Val Thr Gly Arg Arg Ile Ser Ala
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 Thr Ala Glu Asp Gly Asn Lys Phe Ala Lys Leu Ile Val Glu Thr Asp
 65 70 75 80
 Thr Phe Gly Ser Arg Val Arg Ile Lys Gly Ala Glu Ser Glu Lys Tyr
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 Ile Cys Met Asn Lys Arg Gly Lys Leu Ile Gly Lys Pro Ser Gly Lys
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 Ser Lys Asp Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr
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 145 150 155 160
 Ala His Phe Ile Lys Arg Leu Tyr Gln Gly Gln Leu Pro Phe Pro Asn
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<210> 24

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 24

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28

<210> 25

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 25

ccggtgacct gcacgtgctt gcca

24

<210> 26

<211> 41

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<220>

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<222> (21)..(21)

<223> a, t, c or g

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<210> 27

<211> 2479

<212> DNA

<213> Homo sapiens

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 35 40 45
 Cys Asn Glu Arg Ser Leu Thr Ser Val Pro Leu Gly Ile Pro Glu Gly
 50 55 60
 Val Thr Val Leu Tyr Leu His Asn Asn Gln Ile Asn Asn Ala Gly Phe
 65 70 75 80
 Pro Ala Glu Leu His Asn Val Gln Ser Val His Thr Val Tyr Leu Tyr
 85 90 95
 Gly Asn Gln Leu Asp Glu Phe Pro Met Asn Leu Pro Lys Asn Val Arg
 100 105 110
 Val Leu His Leu Gln Glu Asn Asn Ile Gln Thr Ile Ser Arg Ala Ala
 115 120 125
 Leu Ala Gln Leu Leu Lys Leu Glu Glu Leu His Leu Asp Asp Asn Ser
 130 135 140
 Ile Ser Thr Val Gly Val Glu Asp Gly Ala Phe Arg Glu Ala Ile Ser
 145 150 155 160
 Leu Lys Leu Leu Phe Leu Ser Lys Asn His Leu Ser Ser Val Pro Val
 165 170 175
 Gly Leu Pro Val Asp Leu Gln Glu Leu Arg Val Asp Glu Asn Arg Ile
 180 185 190
 Ala Val Ile Ser Asp Met Ala Phe Gln Asn Leu Thr Ser Leu Glu Arg
 195 200 205
 Leu Ile Val Asp Gly Asn Leu Leu Thr Asn Lys Gly Ile Ala Glu Gly
 210 215 220
 Thr Phe Ser His Leu Thr Lys Leu Lys Glu Phe Ser Ile Val Arg Asn
 225 230 235 240
 Ser Leu Ser His Pro Pro Pro Asp Leu Pro Gly Thr His Leu Ile Arg
 245 250 255
 Leu Tyr Leu Gln Asp Asn Gln Ile Asn His Ile Pro Leu Thr Ala Phe
 260 265 270

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ser Asn Leu Arg Lys Leu Glu Arg Leu Asp Ile Ser Asn Asn Gln Leu
275 280 285

Arg Met Leu Thr Gln Gly Val Phe Asp Asn Leu Ser Asn Leu Lys Gln
290 295 300

Leu Thr Ala Arg Asn Asn Pro Trp Phe Cys Asp Cys Ser Ile Lys Trp
305 310 315 320

Val Thr Glu Trp Leu Lys Tyr Ile Pro Ser Ser Leu Asn Val Arg Gly
325 330 335

Phe Met Cys Gln Gly Pro Glu Gln Val Arg Gly Met Ala Val Arg Glu
340 345 350

Leu Asn Met Asn Leu Leu Ser Cys Pro Thr Thr Thr Pro Gly Leu Pro
355 360 365

Leu Phe Thr Pro Ala Pro Ser Thr Ala Ser Pro Thr Thr Gln Pro Pro
370 375 380

Thr Leu Ser Ile Pro Asn Pro Ser Arg Ser Tyr Thr Pro Pro Thr Pro
385 390 395 400

Thr Thr Ser Lys Leu Pro Thr Ile Pro Asp Trp Asp Gly Arg Glu Arg
405 410 415

Val Thr Pro Pro Ile Ser Glu Arg Ile Gln Leu Ser Ile His Phe Val
420 425 430

Asn Asp Thr Ser Ile Gln Val Ser Trp Leu Ser Leu Phe Thr Val Met
435 440 445

Ala Tyr Lys Leu Thr Trp Val Lys Met Gly His Ser Leu Val Gly Gly
450 455 460

Ile Val Gln Glu Arg Ile Val Ser Gly Glu Lys Gln His Leu Ser Leu
465 470 475 480

Val Asn Leu Glu Pro Arg Ser Thr Tyr Arg Ile Cys Leu Val Pro Leu
485 490 495

Asp Ala Phe Asn Tyr Arg Ala Val Glu Asp Thr Ile Cys Ser Glu Ala
500 505 510

Thr Thr His Ala Ser Tyr Leu Asn Asn Gly Ser Asn Thr Ala Ser Ser
515 520 525

His Glu Gln Thr Thr Ser His Ser Met Gly Ser Pro Phe Leu Leu Ala
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Gly Leu Ile Gly Gly Ala Val Ile Phe Val Leu Val Val Leu Leu Ser
545 550 555 560

Val Phe Cys Trp His Met His Lys Lys Gly Arg Tyr Thr Ser Gln Lys
565 570 575

Trp Lys Tyr Asn Arg Gly Arg Arg Lys Asp Asp Tyr Cys Glu Ala Gly
580 585 590

Thr Lys Lys Asp Asn Ser Ile Leu Glu Met Thr Glu Thr Ser Phe Gln
595 600 605

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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Gln Pro Ile Tyr Thr Pro Asn Gly Gly Ile Asn Tyr Thr Asp Cys His
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Ile Pro Asn Asn Met Arg Tyr Cys Asn Ser Ser Val Pro Asp Leu Glu
645 650 655

His Cys His Thr
660

<210> 29
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

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<210> 30
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 30
gcaggacaac cagataaacc ac 22

<210> 31
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 31
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<210> 32
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<212> DNA
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oligonucleotide probe

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<210> 33
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<212> DNA

<213> Homo sapiens

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<210> 34

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 915

<212> PRT

<213> Homo sapiens

<400> 34

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35 40 45Ser Ser Cys Glu Asn Lys Arg Ala Asp Leu Val Phe Ile Ile Asp Ser
50 55 60Ser Arg Ser Val Asn Thr His Asp Tyr Ala Lys Val Lys Glu Phe Ile
65 70 75 80Val Asp Ile Leu Gln Phe Leu Asp Ile Gly Pro Asp Val Thr Arg Val
85 90 95Gly Leu Leu Gln Tyr Gly Ser Thr Val Lys Asn Glu Phe Ser Leu Lys
100 105 110Thr Phe Lys Arg Lys Ser Glu Val Glu Arg Ala Val Lys Arg Met Arg
115 120 125His Leu Ser Thr Gly Thr Met Thr Gly Leu Ala Ile Gln Tyr Ala Leu
130 135 140Asn Ile Ala Phe Ser Glu Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn
145 150 155 160Val Pro Arg Val Ile Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser
165 170 175Val Ala Glu Val Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe
180 185 190Ala Ile Gly Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly
195 200 205Ser Glu Pro His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln
210 215 220Ile Glu Thr Leu Thr Ser Val Phe Gln Lys Lys Leu Cys Thr Ala His
225 230 235 240Met Cys Ser Thr Leu Glu His Asn Cys Ala His Phe Cys Ile Asn Ile
245 250 255Pro Gly Ser Tyr Val Cys Arg Cys Lys Gln Gly Tyr Ile Leu Asn Ser
260 265 270Asp Gln Thr Thr Cys Arg Ile Gln Asp Leu Cys Ala Met Glu Asp His
275 280 285Asn Cys Glu Gln Leu Cys Val Asn Val Pro Gly Ser Phe Val Cys Gln
290 295 300Cys Tyr Ser Gly Tyr Ala Leu Ala Glu Asp Gly Lys Arg Cys Val Ala
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 355 360 365
 Lys Pro Gly Cys Glu His Glu Cys Val Asn Met Glu Glu Ser Tyr Tyr
 370 375 380
 Cys Arg Cys His Arg Gly Tyr Thr Leu Asp Pro Asn Gly Lys Thr Cys
 385 390 395 400
 Ser Arg Val Asp His Cys Ala Gln Gln Asp His Gly Cys Glu Gln Leu
 405 410 415
 Cys Leu Asn Thr Glu Asp Ser Phe Val Cys Gln Cys Ser Glu Gly Phe
 420 425 430
 Leu Ile Asn Glu Asp Leu Lys Thr Cys Ser Arg Val Asp Tyr Cys Leu
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 450 455 460
 Phe Ala Cys Gln Cys Pro Glu Gly His Val Leu Arg Ser Asp Gly Lys
 465 470 475 480
 Thr Cys Ala Lys Leu Asp Ser Cys Ala Leu Gly Asp His Gly Cys Glu
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 His Ser Cys Val Ser Ser Glu Asp Ser Phe Val Cys Gln Cys Phe Glu
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 Gly Tyr Ile Leu Arg Glu Asp Gly Lys Thr Cys Arg Arg Lys Asp Val
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 545 550 555 560
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 595 600 605
 Thr Glu Gly Pro Ile Asp Leu Val Phe Val Ile Asp Gly Ser Lys Ser
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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690 695 700
Phe Thr Gln Gly Glu Gly Ala Arg Pro Leu Ser Thr Arg Val Pro Arg
705 710 715 720
Ala Ala Ile Val Phe Thr Asp Gly Arg Ala Gln Asp Asp Val Ser Glu
725 730 735
Trp Ala Ser Lys Ala Lys Ala Asn Gly Ile Thr Met Tyr Ala Val Gly
740 745 750
Val Gly Lys Ala Ile Glu Glu Glu Leu Gln Glu Ile Ala Ser Glu Pro
755 760 765
Thr Asn Lys His Leu Phe Tyr Ala Glu Asp Phe Ser Thr Met Asp Glu
770 775 780
Ile Ser Glu Lys Leu Lys Lys Gly Ile Cys Glu Ala Leu Glu Asp Ser
785 790 795 800
Asp Gly Arg Gln Asp Ser Pro Ala Gly Glu Leu Pro Lys Thr Val Gln
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Gln Pro Thr Glu Ser Glu Pro Val Thr Ile Asn Ile Gln Asp Leu Leu
820 825 830
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835 840 845
Asn Leu Leu Arg Ser Thr Gln Lys Leu Ser His Ser Thr Lys Pro Ser
850 855 860
Gly Ser Pro Leu Glu Glu Lys His Asp Gln Cys Lys Cys Glu Asn Leu
865 870 875 880
Ile Met Phe Gln Asn Leu Ala Asn Glu Glu Val Arg Lys Leu Thr Gln
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Arg Tyr Arg
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<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 35

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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23

<210> 36

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 36

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22

<210> 37

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 37

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<210> 38

<211> 1813

<212> DNA

<213> Homo sapiens

<400> 38

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1813

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 39
 <211> 390
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 50 55 60
 Pro Trp Glu Val Pro Phe Val Met Trp Phe Phe Lys Gln Lys Glu Lys
 65 70 75 80
 Glu Asp Gln Val Leu Ser Tyr Ile Asn Gly Val Thr Thr Ser Lys Pro
 85 90 95
 Gly Val Ser Leu Val Tyr Ser Met Pro Ser Arg Asn Leu Ser Leu Arg
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 115 120 125
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 130 135 140
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 165 170 175
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 180 185 190
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 195 200 205
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 210 215 220
 Lys Ala His Asn Glu Val Gly Thr Ala Gln Cys Asn Val Thr Leu Glu
 225 230 235 240
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 245 250 255
 Thr Leu Val Gly Leu Gly Leu Leu Ala Gly Leu Val Leu Leu Tyr His
 260 265 270
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 275 280 285
 Ala Ile Ala Pro Arg Thr Leu Pro Trp Pro Lys Ser Ser Asp Thr Ile
 290 295 300

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ser Lys Asn Gly Thr Leu Ser Ser Val Thr Ser Ala Arg Ala Leu Arg
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Pro Pro His Gly Pro Pro Arg Pro Gly Ala Leu Thr Pro Thr Pro Ser
325 330 335

Leu Ser Ser Gln Ala Leu Pro Ser Pro Arg Leu Pro Thr Thr Asp Gly
340 345 350

Ala His Pro Gln Pro Ile Ser Pro Ile Pro Gly Gly Val Ser Ser Ser
355 360 365

Gly Leu Ser Arg Met Gly Ala Val Pro Val Met Val Pro Ala Gln Ser
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Gln Ala Gly Ser Leu Val
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<210> 40

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 40

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22

<210> 41

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<400> 41

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24

<210> 42

<211> 50

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<400> 42

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50

<210> 43

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 43
gtgtgacaca gcgtgggc 18

<210> 44
<211> 18
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 44
gaccggcagg cttctgcg 18

<210> 45
<211> 25
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 45
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<210> 46
<211> 24
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 46
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<210> 47
<211> 45
<212> DNA
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<223> Description of Artificial Sequence: Synthetic
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<210> 48
<211> 2822
<212> DNA
<213> Homo sapiens

<400> 48
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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aa

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<210> 49
 <211> 690
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ser Gly Asn Gly Val Thr Ile Cys Glu Asp Asp Asn Glu Cys Gly Asn
 50 55 60
 Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn Cys Thr Asn Thr Glu Gly
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

65
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 85 90 95
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 115 120 125
 Thr Leu Thr Lys Ile Arg Ser Ile Lys Glu Pro Val Ala Leu Leu Gln
 130 135 140
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 145 150 155 160
 Thr Tyr Ile Glu Ile Leu Ala Glu Ser Ser Ser Leu Leu Gly Tyr Lys
 165 170 175
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 180 185 190
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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450 455 460
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465 470 475 480
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485 490 495
Leu His Tyr Phe Phe Leu Ala Ala Phe Ala Trp Met Cys Ile Glu Gly
500 505 510
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515 520 525
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545 550 555 560
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645 650 655
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Leu Arg
690

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<212> DNA
<213> Homo sapiens

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<223> a, t, c or g

<400> 50

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tataatattc	ttacaaggat	cactcaacta	ggaataatta	tttactgat	ttgtcttgcc	540
atatgcattt	ttaccttctg	gttcttcagt	gaaattcaaa	gcaccagga		589

<210> 51

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 51

ggtaatgagc tccattacag

20

<210> 52

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 52

ggagtagaaa gcgcatgg

18

<210> 53

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 53

cacctgatac catgaatggc ag

22

<210> 54

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 54

cgagctcgaa ttaattcg

18

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 55
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 55
 ggatctcctg agctcagg 18

<210> 56
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 56
 cctagttagag tgatccttgt aag 23

<210> 57
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 57
 atgagaccca cacctcatgc cgctgtaatc acctgacaca ttttgcaatt 50

<210> 58
 <211> 2137
 <212> DNA
 <213> Homo sapiens

<400> 58
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 gggacaagaa gccgccgcct gcctgccggg gccggggag ggggctgggg ctggggccgg 180
 aggcgggggtg tgagtgggtg tgtgcggggg gcggaggctt gatgcaatcc cgataagaaa 240
 tgctcgggtg tcttgggcac ctaccctgtg ggcccgtgag gcgctactat ataaggctgc 300
 cggcccgag ccgccgcgcc gtcagagcag gagcgtgcg tccaggatct agggccacga 360
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 acccccatcg ccggagctgc gccgagagcc ccaggagggt gccatgcgga gcgggtgtgt 480
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 cttctcggac gcggggcccc acgtgcacta cggctggggc gaccccatcc gcctgcggca 600
 cctgtacacc tccggccccc acgggctctc cagctgcttc ctgcgcatcc gtgccgacgg 660
 cgctcgtggac tgcgcgcggg gccagagcgc gcacagtttg ctggagatca aggcagtcgc 720
 tctgcggacc gtggccatca agggcgtgca cagcgtgcgg tacctctgca tgggcgccga 780
 cggcaagatg caggggctgc ttcagtactc ggaggaagac tgtgctttcg aggaggagat 840
 ccgcccagat ggctacaatg tgtaccgatc cgagaagcac cgcctcccgg tctccctgag 900
 cagtgccaaa cagcggcagc tgtacaagaa cagaggcttt cttccactct ctcatttcct 960
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 agtccacgtt ctgtttagct ttaggaagaa acatctagaa gttgtacata ttcagagttt 1260

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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tccattggca gtgccagttt ctagccaata gacttgtctg atcataacat tgtaagcctg 1320
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gctgcaactgt ctcaagtctg cttgaatacc tccatcgatg gggaaactcac ttcctttgga 1440
aaaattctta tgtcaagctg aaattctcta attttttctc atcacttccc caggagcagc 1500
cagaagacag gcagtagttt taatttcagg aacaggtgat ccactctgta aaacagcagg 1560
taaatttcac tcaaccccat gtgggaattg atctatatct ctacttccag ggaccatttg 1620
cccttcccaa atccctccag gccagaactg actggagcag gcatggccca ccaggcttca 1680
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ggccagttct gtcatggatg ctgtcctgag aataacttgc tgtcccggtg tcacctgctt 1800
ccatctccca gccaccagc cctctgccc cctcacatgc ctccccatgg attggggcct 1860
cccaggcccc ccaccttatg tcaacctgca cttcttggtc aaaaatcagg aaaagaaaag 1920
atttgaagac cccaagtctt gtcaataact tgctgtgtgg aagcagcggg ggaagaccta 1980
gaaccctttc cccagcactt ggttttccaa catgatattt atgagtaatt tattttgata 2040
tgtacatctc ttattttctt acattattta tgcccccaa ttatatttat gtatgtaagt 2100
gaggtttgtt ttgtatatta aaatggagtt tgtttgt 2137

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<210> 59
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 59
 Met Arg Ser Gly Cys Val Val Val His Val Trp Ile Leu Ala Gly Leu
 1 5 10 15
 Trp Leu Ala Val Ala Gly Arg Pro Leu Ala Phe Ser Asp Ala Gly Pro
 20 25 30
 His Val His Tyr Gly Trp Gly Asp Pro Ile Arg Leu Arg His Leu Tyr
 35 40 45
 Thr Ser Gly Pro His Gly Leu Ser Ser Cys Phe Leu Arg Ile Arg Ala
 50 55 60
 Asp Gly Val Val Asp Cys Ala Arg Gly Gln Ser Ala His Ser Leu Leu
 65 70 75 80
 Glu Ile Lys Ala Val Ala Leu Arg Thr Val Ala Ile Lys Gly Val His
 85 90 95
 Ser Val Arg Tyr Leu Cys Met Gly Ala Asp Gly Lys Met Gln Gly Leu
 100 105 110
 Leu Gln Tyr Ser Glu Glu Asp Cys Ala Phe Glu Glu Glu Ile Arg Pro
 115 120 125
 Asp Gly Tyr Asn Val Tyr Arg Ser Glu Lys His Arg Leu Pro Val Ser
 130 135 140
 Leu Ser Ser Ala Lys Gln Arg Gln Leu Tyr Lys Asn Arg Gly Phe Leu
 145 150 155 160
 Pro Leu Ser His Phe Leu Pro Met Leu Pro Met Val Pro Glu Glu Pro
 165 170 175
 Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu
 180 185 190
 Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr Gly Leu Glu Ala
 195 200 205
 Val Arg Ser Pro Ser Phe Glu Lys
 210 215

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 60
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 60
atccgcccag atggctacaa tgtgta 26

<210> 61
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 61
gcctcccggg ctccctgagc agtgccaaac agcggcagtg ta 42

<210> 62
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 62
ccagtccggg gacaagccca aa 22

<210> 63
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 63
cccagaagtt caagggcccc cggcctcctg cgctcctgcc gccgggaccc tcgacctcct 60
cagagcagcc ggctgccgcc ccgggaagat ggcgaggagg agccgccacc gcctcctcct 120
gctgctgctg cgctacctgg tggctcgccct gggctatcat aaggcctatg gggtttctgc 180
cccaaaagac caacaagtag tcacagcagt agagtaccaa gaggtatatt tagcctgcaa 240
aaccceaaag aagactgttt cctccagatt agagtgggaa aaactgggtc ggagtgtctc 300
ctttgtctac tatcaacaga ctcttcaagg tgattttaaa aatcgagctg agatgataga 360
tttcaatatc cggatcaaaa atgtgacaag aagtgatgag gggaaatatc gttgtgaagt 420
tagtgcccca tctgagcaag gccaaaacct ggaagaggat acagtcactc tggaagtatt 480
agtggctcca gcagttccat catgtgaagt accctcttct gctctgagtg gaactgtggg 540
agagctacga tgtcaagaca aagaagggaa tccagctcct gaatacacat ggtttaagga 600
tggcatccgt ttgctagaaa atcccagact tggctcccaa agcaccaaca gctcatacac 660
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atattcctgt gaagcccgcg attctgttgg atatcgagcag tgcctgggga aacgaatgca 780
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gttctagacc agtctggcca atatggtgaa accccatctc tactaaaata caaaaattag 1080
ctgggcatgg tggcatgtgc ctgcagttcc agctgcttgg gagacaggag aatcacttga 1140
acccgggagg cggaggttgc agtgagctga gatcacgcca ctgcagtcca gcctgggtaa 1200

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
cagagcaaga ttccatctca aaaaataaaa taaataaata aataaatact ggtttttacc 1260
tgtagaattc ttacaataaa tatagcttga tattc 1295

<210> 64
<211> 312
<212> PRT
<213> Homo sapiens

<400> 64
Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Arg Tyr
1 5 10 15
Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser Ala Pro
20 25 30
Lys Asp Gln Gln Val Val Thr Ala Val Glu Tyr Gln Glu Ala Ile Leu
35 40 45
Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg Leu Glu Trp Lys
50 55 60
Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln
65 70 75 80
Gly Asp Phe Lys Asn Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile
85 90 95
Lys Asn Val Thr Arg Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser
100 105 110
Ala Pro Ser Glu Gln Gly Gln Asn Leu Glu Glu Asp Thr Val Thr Leu
115 120 125
Glu Val Leu Val Ala Pro Ala Val Pro Ser Cys Glu Val Pro Ser Ser
130 135 140
Ala Leu Ser Gly Thr Val Val Glu Leu Arg Cys Gln Asp Lys Glu Gly
145 150 155 160
Asn Pro Ala Pro Glu Tyr Thr Trp Phe Lys Asp Gly Ile Arg Leu Leu
165 170 175
Glu Asn Pro Arg Leu Gly Ser Gln Ser Thr Asn Ser Ser Tyr Thr Met
180 185 190
Asn Thr Lys Thr Gly Thr Leu Gln Phe Asn Thr Val Ser Lys Leu Asp
195 200 205
Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Ser Val Gly Tyr Arg Arg
210 215 220
Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu Asn Ile Ser Gly Ile
225 230 235 240
Ile Ala Ala Val Val Val Val Ala Leu Val Ile Ser Val Cys Gly Leu
245 250 255
Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe Ser Lys Glu Thr Ser
260 265 270
Phe Gln Lys Ser Asn Ser Ser Ser Lys Ala Thr Thr Met Ser Glu Asn
275 280 285

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
Val Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Lys Ala Ala Ala
290 295 300

Gly Gly Ser Arg Gly Gln Glu Phe
305 310

<210> 65

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 65

atcgttgtaga agttagtgcc cc

22

<210> 66

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 66

acctgcgata tccaacagaa ttg

23

<210> 67

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 67

ggaagaggat acagtcactc tggaagtatt agtggctcca gcagttcc

48

<210> 68

<211> 2639

<212> DNA

<213> Homo sapiens

<400> 68

gacatcggag	gtgggctagc	actgaaactg	cttttcaaga	cgaggaagag	gaggagaaag	60
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gcatcatgct	gctattcctg	caaatactga	agaagcatgg	gatttaaata	ttttacttct	180
aaataaatga	attactcaat	ctcctatgac	catctataca	tactccacct	tcaaaaagta	240
catcaatatt	atatcattaa	ggaaatagta	accttctctt	ctccaatatg	catgacattt	300
ttggacaatg	caattgtggc	actggcactt	atttcagtga	agaaaaactt	tgtgggttcta	360
tggcattcat	catttgacaa	atgcaagcat	cttccttata	aatcagctcc	tattgaactt	420
actagcactg	actgtggaat	ccttaagggc	ccattacatt	tctgaagaag	aaagctaaga	480
tgaaggacat	gccactccga	attcatgtgc	tacttggcct	agctatcact	acactagtac	540
aagctgtaga	taaaaaagt	gattgtccac	ggttatgtac	gtgtgaaatc	aggccttggg	600
ttacaccagg	atccatttat	atggaagcat	ctacagtggg	ttgtaatgat	ttaggtcttt	660
taactttccc	agccagattg	ccagctaaca	cacagattct	tctcctacag	actaacaata	720
ttgcaaaaat	tgaatactcc	acagactttc	cagtaaacct	tactggcctg	gatttatctc	780
aaaacaattt	atcttcagtc	accaatatta	atgtaaaaaa	gatgcctcag	ctcctttctg	840
tgtacctaga	ggaaaacaaa	cttactgaac	tgcctgaaaa	atgtctgtcc	gaactgagca	900

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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acttacaaga actctatatatt aatcacaaact tgctttctac aatttcacct ggagccttta 960
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tcagaatcaa agacatgaac ttttaagcctt ttatcaatct tcgcagcctg gttatagctg 1140
gtataaacct cacagaaata ccagataacg ccttgggttg actggaaaac ttagaaagca 1200
tctcttttta cgataacagg cttattaaag taccctcatgt tgctcttcaa aaagttgtaa 1260
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gcaatatgct acacttaaaa gagttgggga taaataatat gcctgagctg atttccatcg 1380
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taaattctctg ggaagcagga aaagaaaaaa gtacatcact gaaagtaaaa gcaactgtta 2580
taggtttacc aacaaatatg tcctaaaaac caccaaggaa acctactcca aaaatgaac 2639

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<210> 69
 <211> 708
 <212> PRT
 <213> Homo sapiens

<400> 69
 Met Lys Asp Met Pro Leu Arg Ile His Val Leu Leu Gly Leu Ala Ile
 1 5 10 15
 Thr Thr Leu Val Gln Ala Val Asp Lys Lys Val Asp Cys Pro Arg Leu
 20 25 30
 Cys Thr Cys Glu Ile Arg Pro Trp Phe Thr Pro Arg Ser Ile Tyr Met
 35 40 45
 Glu Ala Ser Thr Val Asp Cys Asn Asp Leu Gly Leu Leu Thr Phe Pro
 50 55 60
 Ala Arg Leu Pro Ala Asn Thr Gln Ile Leu Leu Leu Gln Thr Asn Asn
 65 70 75 80
 Ile Ala Lys Ile Glu Tyr Ser Thr Asp Phe Pro Val Asn Leu Thr Gly
 85 90 95
 Leu Asp Leu Ser Gln Asn Asn Leu Ser Ser Val Thr Asn Ile Asn Val
 100 105 110
 Lys Lys Met Pro Gln Leu Leu Ser Val Tyr Leu Glu Glu Asn Lys Leu
 115 120 125
 Thr Glu Leu Pro Glu Lys Cys Leu Ser Glu Leu Ser Asn Leu Gln Glu
 130 135 140

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Tyr Ile Asn His Asn Leu Leu Ser Thr Ile Ser Pro Gly Ala Phe
145 150 155 160

Ile Gly Leu His Asn Leu Leu Arg Leu His Leu Asn Ser Asn Arg Leu
165 170 175

Gln Met Ile Asn Ser Lys Trp Phe Asp Ala Leu Pro Asn Leu Glu Ile
180 185 190

Leu Met Ile Gly Glu Asn Pro Ile Ile Arg Ile Lys Asp Met Asn Phe
195 200 205

Lys Pro Leu Ile Asn Leu Arg Ser Leu Val Ile Ala Gly Ile Asn Leu
210 215 220

Thr Glu Ile Pro Asp Asn Ala Leu Val Gly Leu Glu Asn Leu Glu Ser
225 230 235 240

Ile Ser Phe Tyr Asp Asn Arg Leu Ile Lys Val Pro His Val Ala Leu
245 250 255

Gln Lys Val Val Asn Leu Lys Phe Leu Asp Leu Asn Lys Asn Pro Ile
260 265 270

Asn Arg Ile Arg Arg Gly Asp Phe Ser Asn Met Leu His Leu Lys Glu
275 280 285

Leu Gly Ile Asn Asn Met Pro Glu Leu Ile Ser Ile Asp Ser Leu Ala
290 295 300

Val Asp Asn Leu Pro Asp Leu Arg Lys Ile Glu Ala Thr Asn Asn Pro
305 310 315 320

Arg Leu Ser Tyr Ile His Pro Asn Ala Phe Phe Arg Leu Pro Lys Leu
325 330 335

Glu Ser Leu Met Leu Asn Ser Asn Ala Leu Ser Ala Leu Tyr His Gly
340 345 350

Thr Ile Glu Ser Leu Pro Asn Leu Lys Glu Ile Ser Ile His Ser Asn
355 360 365

Pro Ile Arg Cys Asp Cys Val Ile Arg Trp Met Asn Met Asn Lys Thr
370 375 380

Asn Ile Arg Phe Met Glu Pro Asp Ser Leu Phe Cys Val Asp Pro Pro
385 390 395 400

Glu Phe Gln Gly Gln Asn Val Arg Gln Val His Phe Arg Asp Met Met
405 410 415

Glu Ile Cys Leu Pro Leu Ile Ala Pro Glu Ser Phe Pro Ser Asn Leu
420 425 430

Asn Val Glu Ala Gly Ser Tyr Val Ser Phe His Cys Arg Ala Thr Ala
435 440 445

Glu Pro Gln Pro Glu Ile Tyr Trp Ile Thr Pro Ser Gly Gln Lys Leu
450 455 460

Leu Pro Asn Thr Leu Thr Asp Lys Phe Tyr Val His Ser Glu Gly Thr
465 470 475 480

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Asp Ile Asn Gly Val Thr Pro Lys Glu Gly Gly Leu Tyr Thr Cys
485 490 495

Ile Ala Thr Asn Leu Val Gly Ala Asp Leu Lys Ser Val Met Ile Lys
500 505 510

Val Asp Gly Ser Phe Pro Gln Asp Asn Asn Gly Ser Leu Asn Ile Lys
515 520 525

Ile Arg Asp Ile Gln Ala Asn Ser Val Leu Val Ser Trp Lys Ala Ser
530 535 540

Ser Lys Ile Leu Lys Ser Ser Val Lys Trp Thr Ala Phe Val Lys Thr
545 550 555 560

Glu Asn Ser His Ala Ala Gln Ser Ala Arg Ile Pro Ser Asp Val Lys
565 570 575

Val Tyr Asn Leu Thr His Leu Asn Pro Ser Thr Glu Tyr Lys Ile Cys
580 585 590

Ile Asp Ile Pro Thr Ile Tyr Gln Lys Asn Arg Lys Lys Cys Val Asn
595 600 605

Val Thr Thr Lys Gly Leu His Pro Asp Gln Lys Glu Tyr Glu Lys Asn
610 615 620

Asn Thr Thr Thr Leu Met Ala Cys Leu Gly Gly Leu Leu Gly Ile Ile
625 630 635 640

Gly Val Ile Cys Leu Ile Ser Cys Leu Ser Pro Glu Met Asn Cys Asp
645 650 655

Gly Gly His Ser Tyr Val Arg Asn Tyr Leu Gln Lys Pro Thr Phe Ala
660 665 670

Leu Gly Glu Leu Tyr Pro Pro Leu Ile Asn Leu Trp Glu Ala Gly Lys
675 680 685

Glu Lys Ser Thr Ser Leu Lys Val Lys Ala Thr Val Ile Gly Leu Pro
690 695 700

Thr Asn Met Ser
705

<210> 70
<211> 1305
<212> DNA
<213> Homo sapiens

<400> 70
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ttaccacgct tgttgagta gatgaggaat gggctcgtga ttatgctgac attccagcat 180
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tcttctcctt gaaacagtct tactgtatct ggactccaat cagatcacat ctattcccaa 420
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gtttatcgat gagcatgcct tcaaaggagt agctgaaacc ttgcagactc tggacttgct 540
cgacaatcgg attcaaagtg tgcacaaaaa tgccttcaat aacctgaagg ccagggccag 600
aattgccaac aaccctggc actgcgactg tactctacag caagtctga ggagcatggc 660
gtccaatcat gagacagccc acaacgtgat ctgtaaaacg tccgtgttg atgaacatgc 720

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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ggtatattat gtgaggcaaa atcaggagga tgcccggaga cacctcgaat acttgaaatc 900
cctgccaagc aggcagaaga aagcagatga acctgatgat attagcactg tggatatagt 960
tccaaactga ctgtcattga gaaagaaaga aagtagtttg cgattgcagt agaaataagt 1020
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caccctttaa ttgtaccccc gatggtatat ttctgagtaa gctactatct gaacattagt 1200
tagatccatc tcactattta ataatgaaat ttattttttt aattttaaag caaataaaag 1260
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<210> 71
 <211> 259
 <212> PRT
 <213> Homo sapiens

<400> 71
 Met Asn Leu Val Asp Leu Trp Leu Thr Arg Ser Leu Ser Met Cys Leu
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 Leu Leu Gln Ser Phe Val Leu Met Ile Leu Cys Phe His Ser Ala Ser
 20 25 30
 Met Cys Pro Lys Gly Cys Leu Cys Ser Ser Ser Gly Gly Leu Asn Val
 35 40 45
 Thr Cys Ser Asn Ala Asn Leu Lys Glu Ile Pro Arg Asp Leu Pro Pro
 50 55 60
 Glu Thr Val Leu Leu Tyr Leu Asp Ser Asn Gln Ile Thr Ser Ile Pro
 65 70 75 80
 Asn Glu Ile Phe Lys Asp Leu His Gln Leu Arg Val Leu Asn Leu Ser
 85 90 95
 Lys Asn Gly Ile Glu Phe Ile Asp Glu His Ala Phe Lys Gly Val Ala
 100 105 110
 Glu Thr Leu Gln Thr Leu Asp Leu Ser Asp Asn Arg Ile Gln Ser Val
 115 120 125
 His Lys Asn Ala Phe Asn Asn Leu Lys Ala Arg Ala Arg Ile Ala Asn
 130 135 140
 Asn Pro Trp His Cys Asp Cys Thr Leu Gln Gln Val Leu Arg Ser Met
 145 150 155 160
 Ala Ser Asn His Glu Thr Ala His Asn Val Ile Cys Lys Thr Ser Val
 165 170 175
 Leu Asp Glu His Ala Gly Arg Pro Phe Leu Asn Ala Ala Asn Asp Ala
 180 185 190
 Asp Leu Cys Asn Leu Pro Lys Lys Thr Thr Asp Tyr Ala Met Leu Val
 195 200 205
 Thr Met Phe Gly Trp Phe Thr Met Val Ile Ser Tyr Val Val Tyr Tyr
 210 215 220
 Val Arg Gln Asn Gln Glu Asp Ala Arg Arg His Leu Glu Tyr Leu Lys
 225 230 235 240
 Ser Leu Pro Ser Arg Gln Lys Lys Ala Asp Glu Pro Asp Asp Ile Ser

Thr Val Val

<210> 72
<211> 2290
<212> DNA
<213> Homo sapiens

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cccaggaccg cgctgtgctg tgccaccgca agtgctttgt ggagtcctcc gagggcatcc 240
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gcctgaagct catcccgcta ggcgtcttca ctggcctcag caacctgacc aagcaggaca 480
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aaaaaaaaa 2290

<210> 73
<211> 620
<212> PRT
<213> Homo sapiens

<400> 73
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20 25 30

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro Arg Cys Glu Cys
35 40 45

Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys Cys Phe Val Ala
50 55 60

Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu Leu Asp Leu Gly Lys
65 70 75 80

Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu Phe Ala Ser Phe Pro His
85 90 95

Leu Glu Glu Leu Glu Leu Asn Glu Asn Ile Val Ser Ala Val Glu Pro
100 105 110

Gly Ala Phe Asn Asn Leu Phe Asn Leu Arg Thr Leu Gly Leu Arg Ser
115 120 125

Asn Arg Leu Lys Leu Ile Pro Leu Gly Val Phe Thr Gly Leu Ser Asn
130 135 140

Leu Thr Lys Gln Asp Ile Ser Glu Asn Lys Ile Val Ile Leu Leu Asp
145 150 155 160

Tyr Met Phe Gln Asp Leu Tyr Asn Leu Lys Ser Leu Glu Val Gly Asp
165 170 175

Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser Gly Leu Asn Ser
180 185 190

Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr Ser Ile Pro Thr
195 200 205

Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu Arg Leu Arg His
210 215 220

Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys Arg Leu Tyr Arg
225 230 235 240

Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu Asp Thr Met Thr
245 250 255

Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu Ser Ile Thr His
260 265 270

Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg His Leu Val Tyr
275 280 285

Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser Thr Ile Glu Gly
290 295 300

Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile Gln Leu Val Gly
305 310 315 320

Gly Gln Leu Ala Val Val Glu Pro Tyr Ala Phe Arg Gly Leu Asn Tyr
325 330 335

Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr Leu Glu Glu
340 345 350

Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile Leu Asp Ser
355 360 365

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe Arg Arg Arg
 370 375 380

Trp Arg Leu Asn Phe Asn Arg Gln Gln Pro Thr Cys Ala Thr Pro Glu
 385 390 395 400

Phe Val Gln Gly Lys Glu Phe Lys Asp Phe Pro Asp Val Leu Leu Pro
 405 410 415

Asn Tyr Phe Thr Cys Arg Arg Ala Arg Ile Arg Asp Arg Lys Ala Gln
 420 425 430

Gln Val Phe Val Asp Glu Gly His Thr Val Gln Phe Val Cys Arg Ala
 435 440 445

Asp Gly Asp Pro Pro Pro Ala Ile Leu Trp Leu Ser Pro Arg Lys His
 450 455 460

Leu Val Ser Ala Lys Ser Asn Gly Arg Leu Thr Val Phe Pro Asp Gly
 465 470 475 480

Thr Leu Glu Val Arg Tyr Ala Gln Val Gln Asp Asn Gly Thr Tyr Leu
 485 490 495

Cys Ile Ala Ala Asn Ala Gly Gly Asn Asp Ser Met Pro Ala His Leu
 500 505 510

His Val Arg Ser Tyr Ser Pro Asp Trp Pro His Gln Pro Asn Lys Thr
 515 520 525

Phe Ala Phe Ile Ser Asn Gln Pro Gly Glu Gly Glu Ala Asn Ser Thr
 530 535 540

Arg Ala Thr Val Pro Phe Pro Phe Asp Ile Lys Thr Leu Ile Ile Ala
 545 550 555 560

Thr Thr Met Gly Phe Ile Ser Phe Leu Gly Val Val Leu Phe Cys Leu
 565 570 575

Val Leu Leu Phe Leu Trp Ser Arg Gly Lys Gly Asn Thr Lys His Asn
 580 585 590

Ile Glu Ile Glu Tyr Val Pro Arg Lys Ser Asp Ala Gly Ile Ser Ser
 595 600 605

Ala Asp Ala Pro Arg Lys Phe Asn Met Lys Met Ile
 610 615 620

<210> 74

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 74

tcacctggag cctttattgg cc

22

<210> 75

<211> 23

<212> DNA

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 75

ataccagcta taaccaggct gcg

23

<210> 76

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 76

caacagtaag tggtttgatg ctcttcctaaa tctagagatt ctgatgattg
gg

50
52

<210> 77

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 77

ccatgtgtct cctcctacaa ag

22

<210> 78

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 78

gggaatagat gtgatctgat tgg

23

<210> 79

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 79

cacctgtagc aatgcaaadc tcaaggaaat acctagagat cttcctcctg

50

<210> 80

<211> 22

<212> DNA

<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 80

agcaaccgcc tgaagctcat cc

22

<210> 81

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 81

aaggcgcggt gaaagatgta gacg

24

<210> 82

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 82

gactacatgt ttcaggacct gtacaacctc aagtcactgg aggttggcga

50

<210> 83

<211> 1685

<212> DNA

<213> Homo sapiens

<400> 83

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acatcgtagt	ccacccccctc	cccatcccca	gcccccgggg	attcaggctc	gccagcgccc	120
agccaggagg	ccggcccgga	agcgcgatgg	gggccccagc	cgccctcgctc	ctgctcctgc	180
tcctgctggt	cgcctgctgc	tgggcgcccc	gcggggccaa	cctctcccag	gacgacagcc	240
agccctggac	atctgatgaa	acagtgggtg	ctgggtggcac	cgtgggtgctc	aagtgccaaag	300
tgaaaagatca	cgaggactca	tccttgcaat	ggtctaacc	tgctcagcag	actctctact	360
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tcacgcgtgg	gatcgtggct	ttcattgtct	tcctgctgct	catcatgctc	atcttccttg	1200
gccactactt	gatccggcac	aaaggaacct	acctgacaca	tgaggcaaaa	ggctccgacg	1260
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acaagaagga	atatctcatc	tagaggcgcc	tgcccacttc	ctgcgcccc	cagggggccct	1380
gtggggactg	ctggggccgt	caccaaccgc	gacttgatca	gagcaaccgc	agggccgccc	1440
ctcccgcttg	ctcccccagc	caccaccccc	cctgtacaga	atgtctgctt	tgggtgcggt	1500
tttgactctg	gtttggaatg	gggagggagg	agggcggggg	gaggggaggg	ttgccctcag	1560

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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 atctgtctcc aggctggaga ggcaggagcc ctggggtgag aaaagcaaaa aacaaacaaa 1680
 aaaca 1685

<210> 84
 <211> 398
 <212> PRT
 <213> Homo sapiens

<400> 84
 Met Gly Ala Pro Ala Ala Ser Leu Leu Leu Leu Leu Leu Phe Ala
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 Cys Cys Trp Ala Pro Gly Gly Ala Asn Leu Ser Gln Asp Asp Ser Gln
 20 25 30
 Pro Trp Thr Ser Asp Glu Thr Val Val Ala Gly Gly Thr Val Val Leu
 35 40 45
 Lys Cys Gln Val Lys Asp His Glu Asp Ser Ser Leu Gln Trp Ser Asn
 50 55 60
 Pro Ala Gln Gln Thr Leu Tyr Phe Gly Glu Lys Arg Ala Leu Arg Asp
 65 70 75 80
 Asn Arg Ile Gln Leu Val Thr Ser Thr Pro His Glu Leu Ser Ile Ser
 85 90 95
 Ile Ser Asn Val Ala Leu Ala Asp Glu Gly Glu Tyr Thr Cys Ser Ile
 100 105 110
 Phe Thr Met Pro Val Arg Thr Ala Lys Ser Leu Val Thr Val Leu Gly
 115 120 125
 Ile Pro Gln Lys Pro Ile Ile Thr Gly Tyr Lys Ser Ser Leu Arg Glu
 130 135 140
 Lys Asp Thr Ala Thr Leu Asn Cys Gln Ser Ser Gly Ser Lys Pro Ala
 145 150 155 160
 Ala Arg Leu Thr Trp Arg Lys Gly Asp Gln Glu Leu His Gly Glu Pro
 165 170 175
 Thr Arg Ile Gln Glu Asp Pro Asn Gly Lys Thr Phe Thr Val Ser Ser
 180 185 190
 Ser Val Thr Phe Gln Val Thr Arg Glu Asp Asp Gly Ala Ser Ile Val
 195 200 205
 Cys Ser Val Asn His Glu Ser Leu Lys Gly Ala Asp Arg Ser Thr Ser
 210 215 220
 Gln Arg Ile Glu Val Leu Tyr Thr Pro Thr Ala Met Ile Arg Pro Asp
 225 230 235 240
 Pro Pro His Pro Arg Glu Gly Gln Lys Leu Leu Leu His Cys Glu Gly
 245 250 255
 Arg Gly Asn Pro Val Pro Gln Gln Tyr Leu Trp Glu Lys Glu Gly Ser
 260 265 270
 Val Pro Pro Leu Lys Met Thr Gln Glu Ser Ala Leu Ile Phe Pro Phe
 275 280 285

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Asn Lys Ser Asp Ser Gly Thr Tyr Gly Cys Thr Ala Thr Ser Asn
290 295 300

Met Gly Ser Tyr Lys Ala Tyr Tyr Thr Leu Asn Val Asn Asp Pro Ser
305 310 315 320

Pro Val Pro Ser Ser Ser Ser Thr Tyr His Ala Ile Ile Gly Gly Ile
325 330 335

Val Ala Phe Ile Val Phe Leu Leu Leu Ile Met Leu Ile Phe Leu Gly
340 345 350

His Tyr Leu Ile Arg His Lys Gly Thr Tyr Leu Thr His Glu Ala Lys
355 360 365

Gly Ser Asp Asp Ala Pro Asp Ala Asp Thr Ala Ile Ile Asn Ala Glu
370 375 380

Gly Gly Gln Ser Gly Gly Asp Asp Lys Lys Glu Tyr Phe Ile
385 390 395

<210> 85

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 85

gctaggaatt ccacagaagc cc

22

<210> 86

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 86

aacctggaat gtcaccgagc tg

22

<210> 87

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 87

cctagcacag tgacgaggga cttggc

26

<210> 88

<211> 50

<212> DNA

<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 88

aagacacagc caccctaaac tgtcagtctt ctgggagcaa gcctgcagcc 50

<210> 89

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 89

gccctggcag acgagggcga gtacacctgc tcaatcttca ctatgcctgt 50

<210> 90

<211> 2755

<212> DNA

<213> Homo sapiens

<400> 90

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gctgttactt	tgtgatgaga	tcgggggatga	attgctcgct	ttaaaaatgc	tgctttggat	180
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gggcttcaca	agtctgcagc	gtttcactgc	cccgaacttc	cagttttacc	atatttttct	360
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<210> 91
 <211> 696
 <212> PRT
 <213> Homo sapiens

<400> 91
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 Gly Asn Val Thr Gly Asp Val Cys Lys Glu Lys Ile Cys Ser Cys Asn
 20 25 30
 Glu Ile Glu Gly Asp Leu His Val Asp Cys Glu Lys Lys Gly Phe Thr
 35 40 45
 Ser Leu Gln Arg Phe Thr Ala Pro Thr Ser Gln Phe Tyr His Leu Phe
 50 55 60
 Leu His Gly Asn Ser Leu Thr Arg Leu Phe Pro Asn Glu Phe Ala Asn
 65 70 75 80
 Phe Tyr Asn Ala Val Ser Leu His Met Glu Asn Asn Gly Leu His Glu
 85 90 95
 Ile Val Pro Gly Ala Phe Leu Gly Leu Gln Leu Val Lys Arg Leu His
 100 105 110
 Ile Asn Asn Asn Lys Ile Lys Ser Phe Arg Lys Gln Thr Phe Leu Gly
 115 120 125
 Leu Asp Asp Leu Glu Tyr Leu Gln Ala Asp Phe Asn Leu Leu Arg Asp
 130 135 140
 Ile Asp Pro Gly Ala Phe Gln Asp Leu Asn Lys Leu Glu Val Leu Ile
 145 150 155 160
 Leu Asn Asp Asn Leu Ile Ser Thr Leu Pro Ala Asn Val Phe Gln Tyr
 165 170 175
 Val Pro Ile Thr His Leu Asp Leu Arg Gly Asn Arg Leu Lys Thr Leu
 180 185 190
 Pro Tyr Glu Glu Val Leu Glu Gln Ile Pro Gly Ile Ala Glu Ile Leu
 195 200 205
 Leu Glu Asp Asn Pro Trp Asp Cys Thr Cys Asp Leu Leu Ser Leu Lys
 210 215 220
 Glu Trp Leu Glu Asn Ile Pro Lys Asn Ala Leu Ile Gly Arg Val Val
 225 230 235 240
 Cys Glu Ala Pro Thr Arg Leu Gln Gly Lys Asp Leu Asn Glu Thr Thr
 245 250 255

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 Glu Gln Asp Leu Cys Pro Leu Lys Asn Arg Val Asp Ser Ser Leu Pro
 260 265 270

Ala Pro Pro Ala Gln Glu Glu Thr Phe Ala Pro Gly Pro Leu Pro Thr
 275 280 285

Pro Phe Lys Thr Asn Gly Gln Glu Asp His Ala Thr Pro Gly Ser Ala
 290 295 300

Pro Asn Gly Gly Thr Lys Ile Pro Gly Asn Trp Gln Ile Lys Ile Arg
 305 310 315 320

Pro Thr Ala Ala Ile Ala Thr Gly Ser Ser Arg Asn Lys Pro Leu Ala
 325 330 335

Asn Ser Leu Pro Cys Pro Gly Gly Cys Ser Cys Asp His Ile Pro Gly
 340 345 350

Ser Gly Leu Lys Met Asn Cys Asn Asn Arg Asn Val Ser Ser Leu Ala
 355 360 365

Asp Leu Lys Pro Lys Leu Ser Asn Val Gln Glu Leu Phe Leu Arg Asp
 370 375 380

Asn Lys Ile His Ser Ile Arg Lys Ser His Phe Val Asp Tyr Lys Asn
 385 390 395 400

Leu Ile Leu Leu Asp Leu Gly Asn Asn Asn Ile Ala Thr Val Glu Asn
 405 410 415

Asn Thr Phe Lys Asn Leu Leu Asp Leu Arg Trp Leu Tyr Met Asp Ser
 420 425 430

Asn Tyr Leu Asp Thr Leu Ser Arg Glu Lys Phe Ala Gly Leu Gln Asn
 435 440 445

Leu Glu Tyr Leu Asn Val Glu Tyr Asn Ala Ile Gln Leu Ile Leu Pro
 450 455 460

Gly Thr Phe Asn Ala Met Pro Lys Leu Arg Ile Leu Ile Leu Asn Asn
 465 470 475 480

Asn Leu Leu Arg Ser Leu Pro Val Asp Val Phe Ala Gly Val Ser Leu
 485 490 495

Ser Lys Leu Ser Leu His Asn Asn Tyr Phe Met Tyr Leu Pro Val Ala
 500 505 510

Gly Val Leu Asp Gln Leu Thr Ser Ile Ile Gln Ile Asp Leu His Gly
 515 520 525

Asn Pro Trp Glu Cys Ser Cys Thr Ile Val Pro Phe Lys Gln Trp Ala
 530 535 540

Glu Arg Leu Gly Ser Glu Val Leu Met Ser Asp Leu Lys Cys Glu Thr
 545 550 555 560

Pro Val Asn Phe Phe Arg Lys Asp Phe Met Leu Leu Ser Asn Asp Glu
 565 570 575

Ile Cys Pro Gln Leu Tyr Ala Arg Ile Ser Pro Thr Leu Thr Ser His
 580 585 590

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 Ser Lys Asn Ser Thr Gly Leu Ala Glu Thr Gly Thr His Ser Asn Ser
 595 600 605

Tyr Leu Asp Thr Ser Arg Val Ser Ile Ser Val Leu Val Pro Gly Leu
 610 615 620

Leu Leu Val Phe Val Thr Ser Ala Phe Thr Val Val Gly Met Leu Val
 625 630 635 640

Phe Ile Leu Arg Asn Arg Lys Arg Ser Lys Arg Arg Asp Ala Asn Ser
 645 650 655

Ser Ala Ser Glu Ile Asn Ser Leu Gln Thr Val Cys Asp Ser Ser Tyr
 660 665 670

Trp His Asn Gly Pro Tyr Asn Ala Asp Gly Ala His Arg Val Tyr Asp
 675 680 685

Cys Gly Ser His Ser Leu Ser Asp
 690 695

<210> 92

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 92

gttgatctg ggcaacaata ac

22

<210> 93

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 93

attgttgtgc aggctgagtt taag

24

<210> 94

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 94

ggtggctata catgtagtc aattacctgg acacgctgtc ccggg

45

<210> 95

<211> 2226

<212> DNA

<213> Homo sapiens

<400> 95

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<210> 96
 <211> 490
 <212> PRT
 <213> Homo sapiens

<400> 96
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 20 25 30
 Ala Ser Gly Ala Cys Tyr Ser Leu His His Ala Thr Met Lys Arg Gln
 35 40 45
 Ala Ala Glu Glu Ala Cys Ile Leu Arg Gly Gly Ala Leu Ser Thr Val
 50 55 60
 Arg Ala Gly Ala Glu Leu Arg Ala Val Leu Ala Leu Leu Arg Ala Gly
 65 70 75 80
 Pro Gly Pro Gly Gly Gly Ser Lys Asp Leu Leu Phe Trp Val Ala Leu
 85 90 95

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Glu Arg Arg Arg Ser His Cys Thr Leu Glu Asn Glu Pro Leu Arg Gly
100 105 110

Phe Ser Trp Leu Ser Ser Asp Pro Gly Gly Leu Glu Ser Asp Thr Leu
115 120 125

Gln Trp Val Glu Glu Pro Gln Arg Ser Cys Thr Ala Arg Arg Cys Ala
130 135 140

Val Leu Gln Ala Thr Gly Gly Val Glu Pro Ala Gly Trp Lys Glu Met
145 150 155 160

Arg Cys His Leu Arg Ala Asn Gly Tyr Leu Cys Lys Tyr Gln Phe Glu
165 170 175

Val Leu Cys Pro Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr
180 185 190

Arg Ala Pro Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro
195 200 205

Gly Thr Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val
210 215 220

Thr Cys Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly
225 230 235 240

Asp Val Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys Cys
245 250 255

Ala Glu Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala Cys Glu
260 265 270

Cys Ala Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser Cys Val Thr
275 280 285

Ser Gly Glu Gly Gln Pro Thr Leu Gly Gly Thr Gly Val Pro Thr Arg
290 295 300

Arg Pro Pro Ala Thr Ala Thr Ser Pro Val Pro Gln Arg Thr Trp Pro
305 310 315 320

Ile Arg Val Asp Glu Lys Leu Gly Glu Thr Pro Leu Val Pro Glu Gln
325 330 335

Asp Asn Ser Val Thr Ser Ile Pro Glu Ile Pro Arg Trp Gly Ser Gln
340 345 350

Ser Thr Met Ser Thr Leu Gln Met Ser Leu Gln Ala Glu Ser Lys Ala
355 360 365

Thr Ile Thr Pro Ser Gly Ser Val Ile Ser Lys Phe Asn Ser Thr Thr
370 375 380

Ser Ser Ala Thr Pro Gln Ala Phe Asp Ser Ser Ser Ala Val Val Phe
385 390 395 400

Ile Phe Val Ser Thr Ala Val Val Val Leu Val Ile Leu Thr Met Thr
405 410 415

Val Leu Gly Leu Val Lys Leu Cys Phe His Glu Ser Pro Ser Ser Gln
420 425 430

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
Pro Arg Lys Glu Ser Met Gly Pro Pro Gly Leu Glu Ser Asp Pro Glu
435 440 445

Pro Ala Ala Leu Gly Ser Ser Ser Ala His Cys Thr Asn Asn Gly Val
450 455 460

Lys Val Gly Asp Cys Asp Leu Arg Asp Arg Ala Glu Gly Ala Leu Leu
465 470 475 480

Ala Glu Ser Pro Leu Gly Ser Ser Asp Ala
485 490

<210> 97

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 97

tggaaggaga tgcgatgcca cctg

24

<210> 98

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 98

tgaccagtgg ggaaggacag

20

<210> 99

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 99

acagagcaga gggcgccttg

20

<210> 100

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 100

tcagggacaa gtggtgtctc tccc

24

<210> 101

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 101

tcaggaagg agtgtgcagt tctg

24

<210> 102

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 102

acagctcccg atctcagtta cttgcatcgc ggacgaaatc ggcgctcgct

50

<210> 103

<211> 2026

<212> DNA

<213> Homo sapiens

<400> 103

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gtgttatttg ttccaccttc aagcctttgc cctgaggtgt tacaatcttg tcttgcgctt 1980
tctaaatcaa tgcttaataa aatattttta aaggaaaaaa aaaaaa 2026

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<210> 104

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 415

<212> PRT

<213> Homo sapiens

<400> 104

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Ala Thr Gln Leu Ser Arg Gln Gln Ser Pro Glu Arg Pro Val Phe Thr
20 25 30
Cys Gly Gly Ile Leu Thr Gly Glu Ser Gly Phe Ile Gly Ser Glu Gly
35 40 45
Phe Pro Gly Val Tyr Pro Pro Asn Ser Lys Cys Thr Trp Lys Ile Thr
50 55 60
Val Pro Glu Gly Lys Val Val Val Leu Asn Phe Arg Phe Ile Asp Leu
65 70 75 80
Glu Ser Asp Asn Leu Cys Arg Tyr Asp Phe Val Asp Val Tyr Asn Gly
85 90 95
His Ala Asn Gly Gln Arg Ile Gly Arg Phe Cys Gly Thr Phe Arg Pro
100 105 110
Gly Ala Leu Val Ser Ser Gly Asn Lys Met Met Val Gln Met Ile Ser
115 120 125
Asp Ala Asn Thr Ala Gly Asn Gly Phe Met Ala Met Phe Ser Ala Ala
130 135 140
Glu Pro Asn Glu Arg Gly Asp Gln Tyr Cys Gly Gly Leu Leu Asp Arg
145 150 155 160
Pro Ser Gly Ser Phe Lys Thr Pro Asn Trp Pro Asp Arg Asp Tyr Pro
165 170 175
Ala Gly Val Thr Cys Val Trp His Ile Val Ala Pro Lys Asn Gln Leu
180 185 190
Ile Glu Leu Lys Phe Glu Lys Phe Asp Val Glu Arg Asp Asn Tyr Cys
195 200 205
Arg Tyr Asp Tyr Val Ala Val Phe Asn Gly Gly Glu Val Asn Asp Ala
210 215 220
Arg Arg Ile Gly Lys Tyr Cys Gly Asp Ser Pro Pro Ala Pro Ile Val
225 230 235 240
Ser Glu Arg Asn Glu Leu Leu Ile Gln Phe Leu Ser Asp Leu Ser Leu
245 250 255
Thr Ala Asp Gly Phe Ile Gly His Tyr Ile Phe Arg Pro Lys Lys Leu
260 265 270
Pro Thr Thr Thr Glu Gln Pro Val Thr Thr Thr Phe Pro Val Thr Thr
275 280 285
Gly Leu Lys Pro Thr Val Ala Leu Cys Gln Gln Lys Cys Arg Arg Thr
290 295 300
Gly Thr Leu Glu Gly Asn Tyr Cys Ser Ser Asp Phe Val Leu Ala Gly

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 325 330 335
 Ser Ile Ile Asn Ile Tyr Lys Glu Gly Asn Leu Ala Ile Gln Gln Ala
 340 345 350
 Gly Lys Asn Met Ser Ala Arg Leu Thr Val Val Cys Lys Gln Cys Pro
 355 360 365
 Leu Leu Arg Arg Gly Leu Asn Tyr Ile Ile Met Gly Gln Val Gly Glu
 370 375 380
 Asp Gly Arg Gly Lys Ile Met Pro Asn Ser Phe Ile Met Met Phe Lys
 385 390 395 400
 Thr Lys Asn Gln Lys Leu Leu Asp Ala Leu Lys Asn Lys Gln Cys
 405 410 415

<210> 105
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 105
 ccgattcata gacctcgaga gt

22

<210> 106
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 106
 gtcaaggagt cctccacaat ac

22

<210> 107
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 107
 gtgtacaatg gccatgccaa tggccagcgc attggccgct tctgt

45

<210> 108
 <211> 1838
 <212> DNA
 <213> Homo sapiens

<400> 108
 cggaacgcgtg ggcggacgcg tgggcggccc acggcgcccc cgggctgggg cggtcgcttc 60

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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ggtccttgaa agttaaaaaa aaaaaaaaaa aaaaaaaa 1838

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<210> 109
 <211> 420
 <212> PRT
 <213> Homo sapiens

<400> 109
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 20 25 30
 Pro Pro Pro Gln Ser Ser Pro Pro Gln Pro His Pro Cys His Thr
 35 40 45
 Cys Arg Gly Leu Val Asp Ser Phe Asn Lys Gly Leu Glu Arg Thr Ile
 50 55 60
 Arg Asp Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Glu Asn Leu
 65 70 75 80
 Ser Lys Tyr Lys Asp Ser Glu Thr Arg Leu Val Glu Val Leu Glu Gly
 85 90 95
 Val Cys Ser Lys Ser Asp Phe Glu Cys His Arg Leu Leu Glu Leu Ser
 100 105 110
 Glu Glu Leu Val Glu Ser Trp Trp Phe His Lys Gln Gln Glu Ala Pro
 115 120 125
 Asp Leu Phe Gln Trp Leu Cys Ser Asp Ser Leu Lys Leu Cys Cys Pro
 130 135 140

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ala Gly Thr Phe Gly Pro Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu
 145 150 155 160

Arg Pro Cys Gly Gly Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly
 165 170 175

Gly Ser Gly His Cys Asp Cys Gln Ala Gly Tyr Gly Gly Glu Ala Cys
 180 185 190

Gly Gln Cys Gly Leu Gly Tyr Phe Glu Ala Glu Arg Asn Ala Ser His
 195 200 205

Leu Val Cys Ser Ala Cys Phe Gly Pro Cys Ala Arg Cys Ser Gly Pro
 210 215 220

Glu Glu Ser Asn Cys Leu Gln Cys Lys Lys Gly Trp Ala Leu His His
 225 230 235 240

Leu Lys Cys Val Asp Ile Asp Glu Cys Gly Thr Glu Gly Ala Asn Cys
 245 250 255

Gly Ala Asp Gln Phe Cys Val Asn Thr Glu Gly Ser Tyr Glu Cys Arg
 260 265 270

Asp Cys Ala Lys Ala Cys Leu Gly Cys Met Gly Ala Gly Pro Gly Arg
 275 280 285

Cys Lys Lys Cys Ser Pro Gly Tyr Gln Gln Val Gly Ser Lys Cys Leu
 290 295 300

Asp Val Asp Glu Cys Glu Thr Glu Val Cys Pro Gly Glu Asn Lys Gln
 305 310 315 320

Cys Glu Asn Thr Glu Gly Gly Tyr Arg Cys Ile Cys Ala Glu Gly Tyr
 325 330 335

Lys Gln Met Glu Gly Ile Cys Val Lys Glu Gln Ile Pro Glu Ser Ala
 340 345 350

Gly Phe Phe Ser Glu Met Thr Glu Asp Glu Leu Val Val Leu Gln Gln
 355 360 365

Met Phe Phe Gly Ile Ile Ile Cys Ala Leu Ala Thr Leu Ala Ala Lys
 370 375 380

Gly Asp Leu Val Phe Thr Ala Ile Phe Ile Gly Ala Val Ala Ala Met
 385 390 395 400

Thr Gly Tyr Trp Leu Ser Glu Arg Ser Asp Arg Val Leu Glu Gly Phe
 405 410 415

Ile Lys Gly Arg
 420

<210> 110

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 110
cctggctatc agcaggtggg ctccaagtgt ctcgatgtgg atgagtgtga 50

<210> 111
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 111
attctgctg aacactgagg gc 22

<210> 112
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 112
atctgcttgt agccctcggc ac 22

<210> 113
<211> 1616
<212> DNA
<213> Homo sapiens

<220>
<221> modified_base
<222> (1461)..(1461)
<223> a, t, c or g

<400> 113
tgagaccctc ctgcagcctt ctcaaggagc agccccactc tgcctcttgc tcctccaggg 60
cagcaccatg cagccccctgt ggctctgctg ggcactctgg gtgttgcccc tggccagccc 120
cggggccgccc ctgaccgggg agcagctcct gggcagcctg ctgaggcagc tgcagctcaa 180
agaggtgccc accctggaca gggccgacat ggaggagctg gtcaccccc cccacgtgag 240
ggcccagtag gtggccctgc tgcagcgcag ccacggggac cgctcccgcg gaaagagggt 300
cagccagagc ttccgagagg tggccggcag gttcctggcg ttggaggcca gcacacacct 360
gctggtgttc ggcattggagc agcggctgcc gcccaacagc gagctggtgc aggccgtgct 420
gcggctcttc caggagccgg tccccaaagg cgcgctgcac aggcacgggc ggctgtcccc 480
gcgcagcgcc cggggccggg tgaccgtcga gtggctgctg gtccgcgacg acggctccaa 540
ccgcacctcc ctcatcgact ccaggctggt gtccgtccac gagagcggct ggaaggcctt 600
cgacgtgacc gaggccgtga acttctggca gcagctgagc cggccccggc agccgctgct 660
gctacaggtg tcggtgcaga gggagcatct gggcccgcgt gcgtccggcg cccacaagct 720
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cgagaactgg gtgctggagc ccccgggctt cctggcttat gagtgtgtgg gcacctgccg 960
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ccagggtggtc agcctgcccc acatgagggg gcagaagtgc agctgtgcct cggatggtgc 1140
gctcgtgcca aggaggtccc agccataggc gcctagtgtg gccatcgagg gacttgactt 1200
gtgtgtgttt ctgaagtgtt cgaggggtacc aggagagctg gcgatgactg aactgctgat 1260
ggacaaatgc tctgtgctct ctagtgagcc ctgaatttgc ttcctctgac aagttacctc 1320
acctaatttt tgcttctcag gaatgagaat ctttgccac tggagagccc ttgctcagtt 1380
ttctctattc ttattattca ctgcactata ttctaagcac ttacatgtgg agatactgta 1440

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
acctgagggc agaaagccca ntgtgtcatt gtttacttgt cctgtcactg gatctgggct 1500
aaagtcctcc accaccactc tggacctaag acctgggggt aagtgtgggt tgtgcatccc 1560
caatccagat aataaagact ttgtaaaaca tgaataaaac acatttttatt ctaaaa 1616

<210> 114
<211> 366
<212> PRT
<213> Homo sapiens

<400> 114
Met Gln Pro Leu Trp Leu Cys Trp Ala Leu Trp Val Leu Pro Leu Ala
1 5 10 15
Ser Pro Gly Ala Ala Leu Thr Gly Glu Gln Leu Leu Gly Ser Leu Leu
20 25 30
Arg Gln Leu Gln Leu Lys Glu Val Pro Thr Leu Asp Arg Ala Asp Met
35 40 45
Glu Glu Leu Val Ile Pro Thr His Val Arg Ala Gln Tyr Val Ala Leu
50 55 60
Leu Gln Arg Ser His Gly Asp Arg Ser Arg Gly Lys Arg Phe Ser Gln
65 70 75 80
Ser Phe Arg Glu Val Ala Gly Arg Phe Leu Ala Leu Glu Ala Ser Thr
85 90 95
His Leu Leu Val Phe Gly Met Glu Gln Arg Leu Pro Pro Asn Ser Glu
100 105 110
Leu Val Gln Ala Val Leu Arg Leu Phe Gln Glu Pro Val Pro Lys Ala
115 120 125
Ala Leu His Arg His Gly Arg Leu Ser Pro Arg Ser Ala Arg Ala Arg
130 135 140
Val Thr Val Glu Trp Leu Arg Val Arg Asp Asp Gly Ser Asn Arg Thr
145 150 155 160
Ser Leu Ile Asp Ser Arg Leu Val Ser Val His Glu Ser Gly Trp Lys
165 170 175
Ala Phe Asp Val Thr Glu Ala Val Asn Phe Trp Gln Gln Leu Ser Arg
180 185 190
Pro Arg Gln Pro Leu Leu Leu Gln Val Ser Val Gln Arg Glu His Leu
195 200 205
Gly Pro Leu Ala Ser Gly Ala His Lys Leu Val Arg Phe Ala Ser Gln
210 215 220
Gly Ala Pro Ala Gly Leu Gly Glu Pro Gln Leu Glu Leu His Thr Leu
225 230 235 240
Asp Leu Gly Asp Tyr Gly Ala Gln Gly Asp Cys Asp Pro Glu Ala Pro
245 250 255
Met Thr Glu Gly Thr Arg Cys Cys Arg Gln Glu Met Tyr Ile Asp Leu
260 265 270
Gln Gly Met Lys Trp Ala Glu Asn Trp Val Leu Glu Pro Pro Gly Phe
275 280 285

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Ala Tyr Glu Cys Val Gly Thr Cys Arg Gln Pro Pro Glu Ala Leu
290 295 300

Ala Phe Lys Trp Pro Phe Leu Gly Pro Arg Gln Cys Ile Ala Ser Glu
305 310 315 320

Thr Asp Ser Leu Pro Met Ile Val Ser Ile Lys Glu Gly Gly Arg Thr
325 330 335

Arg Pro Gln Val Val Ser Leu Pro Asn Met Arg Val Gln Lys Cys Ser
340 345 350

Cys Ala Ser Asp Gly Ala Leu Val Pro Arg Arg Leu Gln Pro
355 360 365

<210> 115

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 115

aggactgccca taacttgctt g

21

<210> 116

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 116

ataggagttg aagcagcgct gc

22

<210> 117

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 117

tgtgtggaca tagacgagtg ccgctaccgc tactgccagc accgc

45

<210> 118

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 118

gtctgttccc aggagtcctt cggcggctgt tgtgtcagtg gcctgatcgc gatggggaca 60
aaggcgcaag tcgagaggaa actgttgtgc ctcttcatat tggcgatcct gttgtgctcc 120
ctggcattgg gcagtgttac agtgactct tctgaacctg aagtcagaat tcctgagaat 180
aatcctgtga agttgtcctg tgcctactcg ggcttttctt ctccccgtgt ggagtggaag 240

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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tttgaccaag gagacaccac cagactcgtt tgctataata acaagatcac agcttcctat 300
gaggaccggg tgaccttctt gccaaactgt atcaccttca agtccgtgac acgggaagac 360
actgggacat acacttgtat ggtctctgag gaaggcggca acagctatgg ggaggtcaag 420
gtcaagctca tcgtgcttgt gccctccatcc aagcctacag ttaacatccc ctccctcgcc 480
accattggga accgggcagt gctgacatgc tcagaacaag atgggtccccc accttctgaa 540
tacacctggt tcaaagatgg gatagtgatg cctacgaatc ccaaaagcac ccgtgccttc 600
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gcctctgata ctggagaata cagctgtgag gcacggaatg ggtatgggac acccatgact 720
tcaaagtctg tgcgcatgga agctgtggag cggaatgtgg ggtcatcgt ggagccgtc 780
cttgtaacct tgattctcct gggaatcttg gtttttgga tctggttgc ctatagccga 840
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cagaggctga ggcaggcgga tcacctgagg tcgggaggtc gggatcagcc tgaccaacat 1740
ggagaaaccc tactggaat acaaagttag ccaggcatgg tggtgcatgc ctgtagtccc 1800
agctgctcag gagcctggca acaagagcaa aactccagct caaaaaaaaa aaaaaaa 1857

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<210> 119
 <211> 299
 <212> PRT
 <213> Homo sapiens

<400> 119
 Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe Ile
 1 5 10 15
 Leu Ala Ile Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His
 20 25 30
 Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu
 35 40 45
 Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe
 50 55 60
 Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr
 65 70 75 80
 Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe
 85 90 95
 Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser
 100 105 110
 Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val
 115 120 125
 Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr
 130 135 140
 Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro
 145 150 155 160

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn
165 170 175
Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro
180 185 190
Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly
195 200 205
Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser
210 215 220
Asn Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val
225 230 235 240
Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly
245 250 255
Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly
260 265 270
Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu
275 280 285
Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val
290 295

<210> 120

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial sequence: Synthetic
oligonucleotide probe

<400> 120

tcgcggagct gtgttctggt tccc

24

<210> 121

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial sequence: Synthetic
oligonucleotide probe

<400> 121

tgatcgcgat ggggacaaag gcgcaagctc gagaggaaac tgttgtgcct

50

<210> 122

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial sequence: Synthetic
oligonucleotide probe

<400> 122

acacctggtt caaagatggg

20

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 123
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 123
 taggaagagt tgctgaaggc acgg 24

<210> 124
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 124
 ttgccttact caggtgctac 20

<210> 125
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 125
 actcagcagt ggtaggaaag 20

<210> 126
 <211> 1210
 <212> DNA
 <213> Homo sapiens

<400> 126
 cagcgcgtgg cggcgccgc tgtggggaca gcatgagcgg cggttggatg gcgcaggttg 60
 gagcgtggcg aacaggggct ctgggccttg cgctgctgct gctgctcggc ctcggactag 120
 gcctggaggc cgccgcgagc ccgctttcca ccccgacctc tgcccaggcc gcaggcccca 180
 gctcaggctc gtgcccaccc accaagttcc agtgccgcac cagtggctta tgcgtgcccc 240
 tcacctggcg ctgcgacagg gacttggact gcagcgatgg cagcgatgag gaggagtga 300
 ggattgagcc atgtacccag aaagggaat gccaccgcc ccctggcctc ccctgcccct 360
 gcaccggcgt cagtgaactg tctgggggaa ctgacaagaa actgcgcaac tgcagccgcc 420
 tggcctgcct agcaggcgag ctccgttgca cgctgagcga tgactgcatt ccactcacgt 480
 ggcgtgcca cggccaccca gactgtccc actccagcga cgagctcggc tgtggaacca 540
 atgagatcct cccggaagg gatgccaca ccatggggcc ccctgtgacc ctggagagt 600
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 agctaggatg gggaaacctg cacagccaga actgaggggc tggccccagg cagctcccag 1140
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aagttgcttc

<210> 127
<211> 282
<212> PRT
<213> Homo sapiens

<400> 127

Met Ser Gly Gly Trp Met Ala Gln Val Gly Ala Trp Arg Thr Gly Ala
1 5 10 15
Leu Gly Leu Ala Leu Leu Leu Leu Gly Leu Gly Leu Gly Leu Glu
20 25 30
Ala Ala Ala Ser Pro Leu Ser Thr Pro Thr Ser Ala Gln Ala Ala Gly
35 40 45
Pro Ser Ser Gly Ser Cys Pro Pro Thr Lys Phe Gln Cys Arg Thr Ser
50 55 60
Gly Leu Cys Val Pro Leu Thr Trp Arg Cys Asp Arg Asp Leu Asp Cys
65 70 75 80
Ser Asp Gly Ser Asp Glu Glu Glu Cys Arg Ile Glu Pro Cys Thr Gln
85 90 95
Lys Gly Gln Cys Pro Pro Pro Pro Gly Leu Pro Cys Pro Cys Thr Gly
100 105 110
Val Ser Asp Cys Ser Gly Gly Thr Asp Lys Lys Leu Arg Asn Cys Ser
115 120 125
Arg Leu Ala Cys Leu Ala Gly Glu Leu Arg Cys Thr Leu Ser Asp Asp
130 135 140
Cys Ile Pro Leu Thr Trp Arg Cys Asp Gly His Pro Asp Cys Pro Asp
145 150 155 160
Ser Ser Asp Glu Leu Gly Cys Gly Thr Asn Glu Ile Leu Pro Glu Gly
165 170 175
Asp Ala Thr Thr Met Gly Pro Pro Val Thr Leu Glu Ser Val Thr Ser
180 185 190
Leu Arg Asn Ala Thr Thr Met Gly Pro Pro Val Thr Leu Glu Ser Val
195 200 205
Pro Ser Val Gly Asn Ala Thr Ser Ser Ser Ala Gly Asp Gln Ser Gly
210 215 220
Ser Pro Thr Ala Tyr Gly Val Ile Ala Ala Ala Val Leu Ser Ala
225 230 235 240
Ser Leu Val Thr Ala Thr Leu Leu Leu Leu Ser Trp Leu Arg Ala Gln
245 250 255
Glu Arg Leu Arg Pro Leu Gly Leu Leu Val Ala Met Lys Glu Ser Leu
260 265 270
Leu Leu Ser Glu Gln Lys Thr Ser Leu Pro
275 280

<210> 128

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

 <400> 128
 aagttccagt gccgcaccag tggc 24

 <210> 129
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

 <400> 129
 ttggttcac agccgagctc gtcg 24

 <210> 130
 <211> 50
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

 <400> 130
 gaggaggagt gcaggattga gccatgtacc cagaaagggc aatgcccacc 50

 <210> 131
 <211> 1843
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> modified_base
 <222> (1837)..(1837)
 <223> a, t, c or g

 <400> 131
 cccacgcgtc cgggtctcgtc cgctcgcgca gcggcggcag cagaggtcgc gcacagatgc 60
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 cagactcttg caagctggat gccctctgtg gatgaaagat gtatcatgga atgaaccaga 180
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 gctggatccc aagtgataat tccatctgtg tgcaagaaga ttgccgtatc cctcaaatacg 540
 aagatgctga gattcataac aagacatata gacatggaga gaagctaata atcacttgtc 600
 atgaaggatt caagatccgg taccgagacc tacacaatat ggtttcatta tgtcgcgatg 660
 atggaacgtg gaataatctg cccatctgtc aaggctgcct gagacctcta gcctcttcta 720
 atggctatgt aaacatctct gagctccaga cctccttccc ggtggggact gtgatctcct 780
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 ttatctggtc gtccagccca ccccggtgcc ttgtcttggga agcccaagtc tgtccactac 900
 ctccaatggt gagtcacgga gatttcgtct gccacccgcg gccttgtgag cgctacaacc 960
 acggaactgt ggtggagttt tactgcgata ctggctacag cctcaccagc gactacaagt 1020

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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acatcacctg ccagtatgga gagggtgttc cttcttatca agtctactgc atcaaatcag 1080
agcaaactg gcccagcacc catgagaccc tcctgaccac gtggaagatt gtggcggtca 1140
cggcaaccag tgtgctgctg gtgctgctgc tcgtcatcct ggccaggatg ttccagacca 1200
agttcaaggc ccactttccc cccagggggc ctcccggag ttccagcagt gaccttgact 1260
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ctgatcctta aaattgctat gctgatagag tggtagaggc tggaagcttg atcaagtcct 1800
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<210> 132

<211> 490

<212> PRT

<213> Homo sapiens

<400> 132

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Met Tyr His Gly Met Asn Pro Ser Asn Gly Asp Gly Phe Leu Glu Gln
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Gln Gln Gln Gln Gln Gln Pro Gln Ser Pro Gln Arg Leu Leu Ala Val
          20          25          30
Ile Leu Trp Phe Gln Leu Ala Leu Cys Phe Gly Pro Ala Gln Leu Thr
          35          40          45
Gly Gly Phe Asp Asp Leu Gln Val Cys Ala Asp Pro Gly Ile Pro Glu
          50          55          60
Asn Gly Phe Arg Thr Pro Ser Gly Gly Val Phe Phe Glu Gly Ser Val
          65          70          75          80
Ala Arg Phe His Cys Gln Asp Gly Phe Lys Leu Lys Gly Ala Thr Lys
          85          90          95
Arg Leu Cys Leu Lys His Phe Asn Gly Thr Leu Gly Trp Ile Pro Ser
          100          105          110
Asp Asn Ser Ile Cys Val Gln Glu Asp Cys Arg Ile Pro Gln Ile Glu
          115          120          125
Asp Ala Glu Ile His Asn Lys Thr Tyr Arg His Gly Glu Lys Leu Ile
          130          135          140
Ile Thr Cys His Glu Gly Phe Lys Ile Arg Tyr Pro Asp Leu His Asn
          145          150          155          160
Met Val Ser Leu Cys Arg Asp Asp Gly Thr Trp Asn Asn Leu Pro Ile
          165          170          175
Cys Gln Gly Cys Leu Arg Pro Leu Ala Ser Ser Asn Gly Tyr Val Asn
          180          185          190
Ile Ser Glu Leu Gln Thr Ser Phe Pro Val Gly Thr Val Ile Ser Tyr
          195          200          205
Arg Cys Phe Pro Gly Phe Lys Leu Asp Gly Ser Ala Tyr Leu Glu Cys
          210          215          220

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Gln Asn Leu Ile Trp Ser Ser Ser Pro Pro Arg Cys Leu Ala Leu
 225 230 235 240
 Glu Ala Gln Val Cys Pro Leu Pro Pro Met Val Ser His Gly Asp Phe
 245 250 255
 Val Cys His Pro Arg Pro Cys Glu Arg Tyr Asn His Gly Thr Val Val
 260 265 270
 Glu Phe Tyr Cys Asp Pro Gly Tyr Ser Leu Thr Ser Asp Tyr Lys Tyr
 275 280 285
 Ile Thr Cys Gln Tyr Gly Glu Trp Phe Pro Ser Tyr Gln Val Tyr Cys
 290 295 300
 Ile Lys Ser Glu Gln Thr Trp Pro Ser Thr His Glu Thr Leu Leu Thr
 305 310 315 320
 Thr Trp Lys Ile Val Ala Phe Thr Ala Thr Ser Val Leu Leu Val Leu
 325 330 335
 Leu Leu Val Ile Leu Ala Arg Met Phe Gln Thr Lys Phe Lys Ala His
 340 345 350
 Phe Pro Pro Arg Gly Pro Pro Arg Ser Ser Ser Ser Asp Pro Asp Phe
 355 360 365
 Val Val Val Asp Gly Val Pro Val Met Leu Pro Ser Tyr Asp Glu Ala
 370 375 380
 Val Ser Gly Gly Leu Ser Ala Leu Gly Pro Gly Tyr Met Ala Ser Val
 385 390 395 400
 Gly Gln Gly Cys Pro Leu Pro Val Asp Asp Gln Ser Pro Pro Ala Tyr
 405 410 415
 Pro Gly Ser Gly Asp Thr Asp Thr Gly Pro Gly Glu Ser Glu Thr Cys
 420 425 430
 Asp Ser Val Ser Gly Ser Ser Glu Leu Leu Gln Ser Leu Tyr Ser Pro
 435 440 445
 Pro Arg Cys Gln Glu Ser Thr His Pro Ala Ser Asp Asn Pro Asp Ile
 450 455 460
 Ile Ala Ser Thr Ala Glu Glu Val Ala Ser Thr Ser Pro Gly Ile His
 465 470 475 480
 His Ala His Trp Val Leu Phe Leu Arg Asn
 485 490

<210> 133

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 133

atctcctatc gctgctttcc cgg

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 134

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 134

agccaggatc gcagtaaaac tcc

23

<210> 135

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 135

atttaaactt gatgggtctg cgtatcttga gtgcttaca aaccttatct

50

<210> 136

<211> 1815

<212> DNA

<213> Homo sapiens

<400> 136

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ccgtagcgcc cgagtgtcgg ggggcgcacc cgagtcgggc catgaggccg ggaaccgcgc 180
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agcaggaaaa aaaaaa

```

<210> 137

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 382

<212> PRT

<213> Homo sapiens

<400> 137

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Met Arg Pro Gly Thr Ala Leu Gln Ala Val Leu Leu Ala Val Leu Leu
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Val Gly Leu Arg Ala Ala Thr Gly Arg Leu Leu Ser Ala Ser Asp Leu
          20          25          30
Asp Leu Arg Gly Gly Gln Pro Val Cys Arg Gly Gly Thr Gln Arg Pro
          35          40          45
Cys Tyr Lys Val Ile Tyr Phe His Asp Thr Ser Arg Arg Leu Asn Phe
          50          55          60
Glu Glu Ala Lys Glu Ala Cys Arg Arg Asp Gly Gly Gln Leu Val Ser
 65          70          75          80
Ile Glu Ser Glu Asp Glu Gln Lys Leu Ile Glu Lys Phe Ile Glu Asn
          85          90          95
Leu Leu Pro Ser Asp Gly Asp Phe Trp Ile Gly Leu Arg Arg Arg Glu
          100          105          110
Glu Lys Gln Ser Asn Ser Thr Ala Cys Gln Asp Leu Tyr Ala Trp Thr
          115          120          125
Asp Gly Ser Ile Ser Gln Phe Arg Asn Trp Tyr Val Asp Glu Pro Ser
          130          135          140
Cys Gly Ser Glu Val Cys Val Val Met Tyr His Gln Pro Ser Ala Pro
          145          150          155          160
Ala Gly Ile Gly Gly Pro Tyr Met Phe Gln Trp Asn Asp Asp Arg Cys
          165          170          175
Asn Met Lys Asn Asn Phe Ile Cys Lys Tyr Ser Asp Glu Lys Pro Ala
          180          185          190
Val Pro Ser Arg Glu Ala Glu Gly Glu Glu Thr Glu Leu Thr Thr Pro
          195          200          205
Val Leu Pro Glu Glu Thr Gln Glu Glu Asp Ala Lys Lys Thr Phe Lys
          210          215          220
Glu Ser Arg Glu Ala Ala Leu Asn Leu Ala Tyr Ile Leu Ile Pro Ser
          225          230          235          240
Ile Pro Leu Leu Leu Leu Leu Val Val Thr Thr Val Val Cys Trp Val
          245          250          255
Trp Ile Cys Arg Lys Arg Lys Arg Glu Gln Pro Asp Pro Ser Thr Lys
          260          265          270
Lys Gln His Thr Ile Trp Pro Ser Pro His Gln Gly Asn Ser Pro Asp
          275          280          285
Leu Glu Val Tyr Asn Val Ile Arg Lys Gln Ser Glu Ala Asp Leu Ala
          290          295          300
Glu Thr Arg Pro Asp Leu Lys Asn Ile Ser Phe Arg Val Cys Ser Gly

```


CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

305 310 315 320
 Glu Ala Thr Pro Asp Asp Met Ser Cys Asp Tyr Asp Asn Met Ala Val
 325 330 335
 Asn Pro Ser Glu Ser Gly Phe Val Thr Leu Val Ser Val Glu Ser Gly
 340 345 350
 Phe Val Thr Asn Asp Ile Tyr Glu Phe Ser Pro Asp Gln Met Gly Arg
 355 360 365
 Ser Lys Glu Ser Gly Trp Val Glu Asn Glu Ile Tyr Gly Tyr
 370 375 380

<210> 138
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 138
 gttcattgaa aacctcttgc catctgatgg tgacttctgg attgggctca 50

<210> 139
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 139
 aagccaaaga agcctgcagg aggg 24

<210> 140
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 140
 cagtccaagc ataaagggtcc tggc 24

<210> 141
 <211> 1514
 <212> DNA
 <213> Homo sapiens

<400> 141
 ggggtctccc tcagggccgg gaggcacagc ggtccctgct tgctgaaggg ctggatgtac 60
 gcatccgcag gttcccgcgg acttgggggc gcccgctgag ccccggcgcc cgcagaagac 120
 ttgtgtttgc ctctgcagc ctcaacccgg agggcagcga gggcctacca ccatgatcac 180
 tgggtgtgttc agcatgcgct tgtggacccc agtgggctgc ctgacctcgc tggcgactctg 240
 cctgcaccag cggcggggtgg ccctggccga gctgcaggag gccgatggcc agtgtccggt 300
 cgaccgcagc ctgctgaagt tgaaaatggt gcaggctcgtg ttctgacacg gggctcggag 360
 tcctctcaag ccgctccccgc tggaggagca ggtagagtgg aacccccagc tattagaggt 420

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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tgtggaagac attccctttc ttccaccaac cttcaaccca caggaggtct ttattcgttc 660
cactaacatt tttcggaaatc tggagtccac ccgttgtttg ctggctgggc ttttccagt 720
tcagaaagaa ggaccccatca tcatccacac tgatgaagca gattcagaag tcttgatatcc 780
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gcctttatac aatg 1514

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<210> 142
 <211> 428
 <212> PRT
 <213> Homo sapiens

<400> 142
 Met Ile Thr Gly Val Phe Ser Met Arg Leu Trp Thr Pro Val Gly Val
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 Leu Thr Ser Leu Ala Tyr Cys Leu His Gln Arg Arg Val Ala Leu Ala
 20 25 30
 Glu Leu Gln Glu Ala Asp Gly Gln Cys Pro Val Asp Arg Ser Leu Leu
 35 40 45
 Lys Leu Lys Met Val Gln Val Val Phe Arg His Gly Ala Arg Ser Pro
 50 55 60
 Leu Lys Pro Leu Pro Leu Glu Glu Gln Val Glu Trp Asn Pro Gln Leu
 65 70 75 80
 Leu Glu Val Pro Pro Gln Thr Gln Phe Asp Tyr Thr Val Thr Asn Leu
 85 90 95
 Ala Gly Gly Pro Lys Pro Tyr Ser Pro Tyr Asp Ser Gln Tyr His Glu
 100 105 110
 Thr Thr Leu Lys Gly Gly Met Phe Ala Gly Gln Leu Thr Lys Val Gly
 115 120 125
 Met Gln Gln Met Phe Ala Leu Gly Glu Arg Leu Arg Lys Asn Tyr Val
 130 135 140
 Glu Asp Ile Pro Phe Leu Ser Pro Thr Phe Asn Pro Gln Glu Val Phe
 145 150 155 160
 Ile Arg Ser Thr Asn Ile Phe Arg Asn Leu Glu Ser Thr Arg Cys Leu
 165 170 175
 Leu Ala Gly Leu Phe Gln Cys Gln Lys Glu Gly Pro Ile Ile Ile His
 180 185 190
 Thr Asp Glu Ala Asp Ser Glu Val Leu Tyr Pro Asn Tyr Gln Ser Cys

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

195 Trp Ser Leu Arg Gln Arg Thr Arg Gly Arg Arg Gln Thr Ala Ser Leu
210 215 220

Gln Pro Gly Ile Ser Glu Asp Leu Lys Lys Val Lys Asp Arg Met Gly
225 230 235 240

Ile Asp Ser Ser Asp Lys Val Asp Phe Phe Ile Leu Leu Asp Asn Val
245 250 255

Ala Ala Glu Gln Ala His Asn Leu Pro Ser Cys Pro Met Leu Lys Arg
260 265 270

Phe Ala Arg Met Ile Glu Gln Arg Ala Val Asp Thr Ser Leu Tyr Ile
275 280 285

Leu Pro Lys Glu Asp Arg Glu Ser Leu Gln Met Ala Val Gly Pro Phe
290 295 300

Leu His Ile Leu Glu Ser Asn Leu Leu Lys Ala Met Asp Ser Ala Thr
305 310 315 320

Ala Pro Asp Lys Ile Arg Lys Leu Tyr Leu Tyr Ala Ala His Asp Val
325 330 335

Thr Phe Ile Pro Leu Leu Met Thr Leu Gly Ile Phe Asp His Lys Trp
340 345 350

Pro Pro Phe Ala Val Asp Leu Thr Met Glu Leu Tyr Gln His Leu Glu
355 360 365

Ser Lys Glu Trp Phe Val Gln Leu Tyr Tyr His Gly Lys Glu Gln Val
370 375 380

Pro Arg Gly Cys Pro Asp Gly Leu Cys Pro Leu Asp Met Phe Leu Asn
385 390 395 400

Ala Met Ser Val Tyr Thr Leu Ser Pro Glu Lys Tyr His Ala Leu Cys
405 410 415

Ser Gln Thr Gln Val Met Glu Val Gly Asn Glu Glu
420 425

<210> 143

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 143

ccaactacca aagctgctgg agcc

24

<210> 144

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Page 71

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
oligonucleotide probe

<400> 144
gcagctctat taccacggga agga

24

<210> 145
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 145
tccttcccgt ggtaatagag ctgc

24

<210> 146
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 146
ggcagagaac cagaggccgg aggagactgc ctctttacag ccagg

45

<210> 147
<211> 1686
<212> DNA
<213> Homo sapiens

<400> 147
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caaccatgat gaagacacgt gggtcgaatg tgaagatccc tttgacttga gactagtagg 840
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atctaattag atataaaatt ctggttaact tatttacaat aataaagata gcactatgtg 1680

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
1686

ttcaaa

<210> 148
<211> 347
<212> PRT
<213> Homo sapiens

<400> 148
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20 25 30
Cys Glu Gly Arg Val Glu Val Glu Gln Lys Gly Gln Trp Gly Thr Val
35 40 45
Cys Asp Asp Gly Trp Asp Ile Lys Asp Val Ala Val Leu Cys Arg Glu
50 55 60
Leu Gly Cys Gly Ala Ala Ser Gly Thr Pro Ser Gly Ile Leu Tyr Glu
65 70 75 80
Pro Pro Ala Glu Lys Glu Gln Lys Val Leu Ile Gln Ser Val Ser Cys
85 90 95
Thr Gly Thr Glu Asp Thr Leu Ala Gln Cys Glu Gln Glu Glu Val Tyr
100 105 110
Asp Cys Ser His Asp Glu Asp Ala Gly Ala Ser Cys Glu Asn Pro Glu
115 120 125
Ser Ser Phe Ser Pro Val Pro Glu Gly Val Arg Leu Ala Asp Gly Pro
130 135 140
Gly His Cys Lys Gly Arg Val Glu Val Lys His Gln Asn Gln Trp Tyr
145 150 155 160
Thr Val Cys Gln Thr Gly Trp Ser Leu Arg Ala Ala Lys Val Val Cys
165 170 175
Arg Gln Leu Gly Cys Gly Arg Ala Val Leu Thr Gln Lys Arg Cys Asn
180 185 190
Lys His Ala Tyr Gly Arg Lys Pro Ile Trp Leu Ser Gln Met Ser Cys
195 200 205
Ser Gly Arg Glu Ala Thr Leu Gln Asp Cys Pro Ser Gly Pro Trp Gly
210 215 220
Lys Asn Thr Cys Asn His Asp Glu Asp Thr Trp Val Glu Cys Glu Asp
225 230 235 240
Pro Phe Asp Leu Arg Leu Val Gly Gly Asp Asn Leu Cys Ser Gly Arg
245 250 255
Leu Glu Val Leu His Lys Gly Val Trp Gly Ser Val Cys Asp Asp Asn
260 265 270
Trp Gly Glu Lys Glu Asp Gln Val Val Cys Lys Gln Leu Gly Cys Gly
275 280 285
Lys Ser Leu Ser Pro Ser Phe Arg Asp Arg Lys Cys Tyr Gly Pro Gly
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

290

295

300

Val Gly Arg Ile Trp Leu Asp Asn Val Arg Cys Ser Gly Glu Glu Gln
 305 310 315 320

Ser Leu Glu Gln Cys Gln His Arg Phe Trp Gly Phe His Asp Cys Thr
 325 330 335

His Gln Glu Asp Val Ala Val Ile Cys Ser Val
 340 345

<210> 149

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 149

ttcagctcat caccttcacc tgcc

24

<210> 150

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 150

ggctcataca aaataccact aggg

24

<210> 151

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 151

gggcctccac cgctgtgaag ggcgggtgga ggtggaacag aaaggccagt

50

<210> 152

<211> 1427

<212> DNA

<213> Homo sapiens

<400> 152

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 gaagggtgaag gccatggact tcatcacctc cacagccatc ctgcccctgc tgttcggctg 180
 cctgggcgtc ttcggcctct tccggctgct gcagtgggtg cgcgggaagg cctacctgct 240
 gaatgctgtg gtggtgatca caggcgccac ctcagggtg ggcaaagaat gtgcaaaagt 300
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 gctcatcaga gaacttaccg cttctcatgc caccaagggtg cagacacaca agccttactt 420
 ggtgaccttc gacctcacag actctggggc catagtgtgca gcagcagctg agatcctgca 480
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<210> 153

<211> 310

<212> PRT

<213> Homo sapiens

<400> 153

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Leu Gly Val Phe Gly Leu Phe Arg Leu Leu Gln Trp Val Arg Gly Lys
          20             25             30
Ala Tyr Leu Arg Asn Ala Val Val Val Ile Thr Gly Ala Thr Ser Gly
          35             40             45
Leu Gly Lys Glu Cys Ala Lys Val Phe Tyr Ala Ala Gly Ala Lys Leu
          50             55             60
Val Leu Cys Gly Arg Asn Gly Gly Ala Leu Glu Glu Leu Ile Arg Glu
          65             70             75             80
Leu Thr Ala Ser His Ala Thr Lys Val Gln Thr His Lys Pro Tyr Leu
          85             90             95
Val Thr Phe Asp Leu Thr Asp Ser Gly Ala Ile Val Ala Ala Ala Ala
          100            105            110
Glu Ile Leu Gln Cys Phe Gly Tyr Val Asp Ile Leu Val Asn Asn Ala
          115            120            125
Gly Ile Ser Tyr Arg Gly Thr Ile Met Asp Thr Thr Val Asp Val Asp
          130            135            140
Lys Arg Val Met Glu Thr Asn Tyr Phe Gly Pro Val Ala Leu Thr Lys
          145            150            155            160
Ala Leu Leu Pro Ser Met Ile Lys Arg Arg Gln Gly His Ile Val Ala
          165            170            175
Ile Ser Ser Ile Gln Gly Lys Met Ser Ile Pro Phe Arg Ser Ala Tyr
          180            185            190
Ala Ala Ser Lys His Ala Thr Gln Ala Phe Phe Asp Cys Leu Arg Ala
          195            200            205
Glu Met Glu Gln Tyr Glu Ile Glu Val Thr Val Ile Ser Pro Gly Tyr
          210            215            220

```

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ile His Thr Asn Leu Ser Val Asn Ala Ile Thr Ala Asp Gly Ser Arg
225 230 235 240

Tyr Gly Val Met Asp Thr Thr Thr Ala Gln Gly Arg Ser Pro Val Glu
245 250 255

Val Ala Gln Asp Val Leu Ala Ala Val Gly Lys Lys Lys Lys Asp Val
260 265 270

Ile Leu Ala Asp Leu Leu Pro Ser Leu Ala Val Tyr Leu Arg Thr Leu
275 280 285

Ala Pro Gly Leu Phe Phe Ser Leu Met Ala Ser Arg Ala Arg Lys Glu
290 295 300

Arg Lys Ser Lys Asn Ser
305 310

<210> 154

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 154

ggtgctaaac tgggtgctctg tggc

24

<210> 155

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 155

cagggcaaga tgagcattcc

20

<210> 156

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 156

tcatactggt ccatctcggc acgc

24

<210> 157

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 157
aatggtgggg ccctagaaga gctcatcaga gaactcaccg cttctcatgc 50

<210> 158
<211> 1771
<212> DNA
<213> Homo sapiens

<400> 158
cccacgcgtc cgctgggtgtt agatcgagca accctctaaa agcagtttag agtggtaaaa 60
aaaaaaaaaa acacacccaaa cgctcgagc cacaaaaggg atgaaatttc ttctggacat 120
cctcctgctt ctcccgttac tgatcgctctg ctccctagag tccttcgtga agctttttat 180
tcctaagagg agaaaatcag tcaccggcga aatcggtgctg attacaggag ctgggcatgg 240
aattgggaga ctgactgcct atgaatttgc taaacttaaa agcaagctgg ttctctggga 300
tataaataag catggactgg aggaaacagc tgccaaatgc aagggaactgg gtgccaaggt 360
tcataccttt gtggtagact gcagcaaccg agaagataat tacagctctg caaagaaggt 420
gaaggcagaa attggagatg ttagtatttt agtaaataat gctgggtgtag tctatacatc 480
agatttggtt gctacacaag atcctcagat tgaaaagact tttgaagtta atgtacttgc 540
acatttctgg actacaaagg catttcttcc tgcaatgacg aagaataacc atggccatat 600
tgtcactgtg gcttcggcag ctggacatgt ctcggtcccc ttcttactgg cttactgttc 660
aagcaagttt gctgctgttg gatttcataa aactttgaca gatgaactgg ctgccttaca 720
aataactgga gtcaaaaacaa catgtctgtg tcctaatttc gtaaacactg gcttcatcaa 780
aaatccaagt acaagtttgg gaccactctt ggaacctgag gaagtggtaa acaggctgat 840
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tcatttacta ccacttggtt tttagccaaa agctgattac atatgatata aacagagaaa 1200
tacctttaga ggtgacttta aggaaaatga agaaaaagaa ccaaaatgac tttattaaaa 1260
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gctagagggtg gatacacgtg ttgcaagtat aaaagcatca ctgggattta aggagaattg 1620
agagaatgta cccacaaatg gcagcaataa taaatggatc acacttaaaa aaaaaaaaaa 1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a a 1771

<210> 159
<211> 300
<212> PRT
<213> Homo sapiens

<400> 159
Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Leu Pro Leu Leu Ile Val
1 5 10 15
Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg Arg Lys
20 25 30
Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly His Gly Ile
35 40 45
Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys Ser Lys Leu Val
50 55 60
Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu Thr Ala Ala Lys Cys
65 70 75 80
Lys Gly Leu Gly Ala Lys Val His Thr Phe Val Val Asp Cys Ser Asn
85 90 95

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Arg Glu Asp Ile Tyr Ser Ser Ala Lys Lys Val Lys Ala Glu Ile Gly
100 105 110
Asp Val Ser Ile Leu Val Asn Asn Ala Gly Val Val Tyr Thr Ser Asp
115 120 125
Leu Phe Ala Thr Gln Asp Pro Gln Ile Glu Lys Thr Phe Glu Val Asn
130 135 140
Val Leu Ala His Phe Trp Thr Thr Lys Ala Phe Leu Pro Ala Met Thr
145 150 155 160
Lys Asn Asn His Gly His Ile Val Thr Val Ala Ser Ala Ala Gly His
165 170 175
Val Ser Val Pro Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala
180 185 190
Val Gly Phe His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile
195 200 205
Thr Gly Val Lys Thr Thr Cys Leu Cys Pro Asn Phe Val Asn Thr Gly
210 215 220
Phe Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro Thr Leu Glu Pro Glu
225 230 235 240
Glu Val Val Asn Arg Leu Met His Gly Ile Leu Thr Glu Gln Lys Met
245 250 255
Ile Phe Ile Pro Ser Ser Ile Ala Phe Leu Thr Thr Leu Glu Arg Ile
260 265 270
Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile Ser Val Lys
275 280 285
Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln
290 295 300

<210> 160

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 160

ggtgaaggca gaaattggag atg

23

<210> 161

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 161

atcccatgca tcagcctgtt tacc

24

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 162
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 162
gctggtgtag tctatacatc agatttggtt gctacacaag atcctcag 48

<210> 163
<211> 2076
<212> DNA
<213> Homo sapiens

<400> 163
cccacgcgtc cgccggacgcg tgggtcgact agttctagat cgcgagcggc cgcccgcggc 60
tcagggagga gcaccgactg cgccgcaccc tgagagatgg ttggtgccat gtggaagggtg 120
attgtttcgc tggctctgtt gatgcctggc ccctgtgatg ggctgtttcg ctccctatac 180
agaagtgttt ccatgccacc taaggagagc tcaggacagc cattattttct cacccttac 240
attgaagctg ggaagatcca aaaaggaaga gaattgagtt tggctcggccc tttccagga 300
ctgaacatga agagtattgc cggcttcctc accgtgaata agacttaca cagcaacctc 360
ttcttctggt tcttcccagc tcagatacag ccagaagatg cccagtagt tctctggcta 420
caggggtgggc cgggaggttc atccatgttt ggactccttg tggaacatgg gccttatgtt 480
gtcacaagta acatgacctt gcgtgacaga gacttcccct ggaccacaac gctctccatg 540
ctttacattg acaatccagt gggcacaggc ttcagtttta ctgatgatac ccacggatat 600
gcagtcaatg aggacgatgt agcacgggat ttatacagtg cactaattca gtttttccag 660
atatttcctg aatataaaaa taatgacttt tatgtcactg gggagtctta tgcagggaaa 720
tatgtgccag ccattgcaca cctcatccat tccctcaacc ctgtgagaga ggtgaagatc 780
aacctgaacg gaattgctat tggagatgga tattctgatc ccgaatcaat tatagggggc 840
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tttaatgatg gaactatagt tgaaaagtac ttgcgagaag atacagtaca gtcagttaag 1200
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caggaatata agaaggcaga aaaaaaagtt tggagatct ttaaactctga cagtgaagtg 1380
gctgggtaca tccggcaagc gggtgacttc catcaggtaa ttattcgagg tggaggacat 1440
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aaaggatggg atccttatgt tggataaact accttcccaa aagagaacat cagaggtttt 1560
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gtgtttggaa atattatttg ataagaatag ctcaattatc ccaaataaat ggatgaagct 1980
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gaaataaaaa tattatatat aaaagtaaaa aaaaaa 2076

<210> 164
<211> 476
<212> PRT
<213> Homo sapiens

<400> 164
Met Val Gly Ala Met Trp Lys Val Ile Val Ser Leu Val Leu Leu Met
1 5 10 15

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Pro Gly Pro Cys Asp Gly Leu Phe Arg Ser Leu Tyr Arg Ser Val Ser
20 25 30
Met Pro Pro Lys Gly Asp Ser Gly Gln Pro Leu Phe Leu Thr Pro Tyr
35 40 45
Ile Glu Ala Gly Lys Ile Gln Lys Gly Arg Glu Leu Ser Leu Val Gly
50 55 60
Pro Phe Pro Gly Leu Asn Met Lys Ser Tyr Ala Gly Phe Leu Thr Val
65 70 75 80
Asn Lys Thr Tyr Asn Ser Asn Leu Phe Phe Trp Phe Phe Pro Ala Gln
85 90 95
Ile Gln Pro Glu Asp Ala Pro Val Val Leu Trp Leu Gln Gly Gly Pro
100 105 110
Gly Gly Ser Ser Met Phe Gly Leu Phe Val Glu His Gly Pro Tyr Val
115 120 125
Val Thr Ser Asn Met Thr Leu Arg Asp Arg Asp Phe Pro Trp Thr Thr
130 135 140
Thr Leu Ser Met Leu Tyr Ile Asp Asn Pro Val Gly Thr Gly Phe Ser
145 150 155 160
Phe Thr Asp Asp Thr His Gly Tyr Ala Val Asn Glu Asp Asp Val Ala
165 170 175
Arg Asp Leu Tyr Ser Ala Leu Ile Gln Phe Phe Gln Ile Phe Pro Glu
180 185 190
Tyr Lys Asn Asn Asp Phe Tyr Val Thr Gly Glu Ser Tyr Ala Gly Lys
195 200 205
Tyr Val Pro Ala Ile Ala His Leu Ile His Ser Leu Asn Pro Val Arg
210 215 220
Glu Val Lys Ile Asn Leu Asn Gly Ile Ala Ile Gly Asp Gly Tyr Ser
225 230 235 240
Asp Pro Glu Ser Ile Ile Gly Gly Tyr Ala Glu Phe Leu Tyr Gln Ile
245 250 255
Gly Leu Leu Asp Glu Lys Gln Lys Lys Tyr Phe Gln Lys Gln Cys His
260 265 270
Glu Cys Ile Glu His Ile Arg Lys Gln Asn Trp Phe Glu Ala Phe Glu
275 280 285
Ile Leu Asp Lys Leu Leu Asp Gly Asp Leu Thr Ser Asp Pro Ser Tyr
290 295 300
Phe Gln Asn Val Thr Gly Cys Ser Asn Tyr Tyr Asn Phe Leu Arg Cys
305 310 315 320
Thr Glu Pro Glu Asp Gln Leu Tyr Tyr Val Lys Phe Leu Ser Leu Pro
325 330 335
Glu Val Arg Gln Ala Ile His Val Gly Asn Gln Thr Phe Asn Asp Gly
340 345 350

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Thr Ile Val Glu Lys Tyr Leu Arg Glu Asp Thr Val Gln Ser Val Lys
 355 360 365
 Pro Trp Leu Thr Glu Ile Met Asn Asn Tyr Lys Val Leu Ile Tyr Asn
 370 375 380
 Gly Gln Leu Asp Ile Ile Val Ala Ala Ala Leu Thr Glu Arg Ser Leu
 385 390 395 400
 Met Gly Met Asp Trp Lys Gly Ser Gln Glu Tyr Lys Lys Ala Glu Lys
 405 410 415
 Lys Val Trp Lys Ile Phe Lys Ser Asp Ser Glu Val Ala Gly Tyr Ile
 420 425 430
 Arg Gln Ala Gly Asp Phe His Gln Val Ile Ile Arg Gly Gly Gly His
 435 440 445
 Ile Leu Pro Tyr Asp Gln Pro Leu Arg Ala Phe Asp Met Ile Asn Arg
 450 455 460
 Phe Ile Tyr Gly Lys Gly Trp Asp Pro Tyr Val Gly
 465 470 475

<210> 165

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 165

ttccatgcc cctaaggag actc

24

<210> 166

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 166

tggatgaggt gtgcaatggc tggc

24

<210> 167

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 167

agctctcaga ggctggtcat aggg

24

<210> 168

<211> 50

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 168

gtcggccctt tcccaggact gaacatgaag agttatgccg gcttcctcac

50

<210> 169

<211> 2477

<212> DNA

<213> Homo sapiens

<400> 169

cgagggcttt	tccggctccg	gaatggcaca	tgtgggaatc	ccagtcttgt	tggctacaac	60
atttttccct	ttcctaacaa	gttctaacag	ctgttctaac	agctagtgat	caggggttct	120
tcttgctgga	gaagaaaggg	ctgagggcag	agcagggcac	tctcactcag	ggtgaccagc	180
tccttgccct	tctgtggata	acagagcatg	agaaagtga	gagatgcagc	ggagtggagt	240
gatggaagtc	taaaatagga	aggaattttg	tgtgcaatat	cagactctgg	gagcagttga	300
cctggagagc	ctgggggagg	gcctgcctaa	caagctttca	aaaaacagga	gcgacttcca	360
ctgggctggg	ataagacgtg	ccggtaggat	agggagagct	gggtttagtc	ctaatatcaa	420
attgactggc	tgggtgaact	tcaacagcct	tttaacctct	ctgggagatg	aaaacgatgg	480
cttaaggggc	cagaaataga	gatgctttgt	aaaataaaat	tttaaaaaaa	gcaagtattt	540
tatagcataa	aggctagaga	ccaaaataga	taacaggatt	ccctgaacat	tcctaagagg	600
gagaaagtat	gttaaaaata	gaaaaaccaa	aatgcagaag	gaggagactc	acagagctaa	660
accaggatgg	ggaccctggg	tcaggccagc	ctctttgtct	ctcccggaaa	ttatttttgg	720
tctgaccact	ctgccttggt	ttttgcagaa	tcattgtgag	gccaaaccgg	gaagggtggg	780
cagatgagca	cacacaggag	ccgtctcctc	accgccggcc	ctctcagcat	ggaacagagg	840
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aatcgtgact	ggaccttcaa	ccacttgacc	gtccaccaag	ggacgggggc	cgtctatgtg	1020
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aggggttaat	tttgtgactt	agcttctagc	tacttctctc	agccatcagt	cattgggtat	2400
gtaaggaatg	caagcgtatt	tcaatatttc	ccaaacttta	agaaaaaact	ttaagaagggt	2460
acatctgcaa	aagcaaaa					2477

<210> 170

<211> 552

<212> PRT

<213> Homo sapiens

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 170

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Met Gly Thr Leu Gly Gln Ala Ser Leu Phe Ala Pro Pro Gly Asn Tyr
 1          5          10          15
Phe Trp Ser Asp His Ser Ala Leu Cys Phe Ala Glu Ser Cys Glu Gly
          20          25          30
Gln Pro Gly Lys Val Glu Gln Met Ser Thr His Arg Ser Arg Leu Leu
          35          40          45
Thr Ala Ala Pro Leu Ser Met Glu Gln Arg Gln Pro Trp Pro Arg Ala
          50          55          60
Leu Glu Val Asp Ser Arg Ser Val Val Leu Leu Ser Val Val Trp Val
          65          70          75          80
Leu Leu Ala Pro Pro Ala Ala Gly Met Pro Gln Phe Ser Thr Phe His
          85          90          95
Ser Glu Asn Arg Asp Trp Thr Phe Asn His Leu Thr Val His Gln Gly
          100          105          110
Thr Gly Ala Val Tyr Val Gly Ala Ile Asn Arg Val Tyr Lys Leu Thr
          115          120          125
Gly Asn Leu Thr Ile Gln Val Ala His Lys Thr Gly Pro Glu Glu Asp
          130          135          140
Asn Lys Ser Arg Tyr Pro Pro Leu Ile Val Gln Pro Cys Ser Glu Val
          145          150          155          160
Leu Thr Leu Thr Asn Asn Val Asn Lys Leu Leu Ile Ile Asp Tyr Ser
          165          170          175
Glu Asn Arg Leu Leu Ala Cys Gly Ser Leu Tyr Gln Gly Val Cys Lys
          180          185          190
Leu Leu Arg Leu Asp Asp Leu Phe Ile Leu Val Glu Pro Ser His Lys
          195          200          205
Lys Glu His Tyr Leu Ser Ser Val Asn Lys Thr Gly Thr Met Tyr Gly
          210          215          220
Val Ile Val Arg Ser Glu Gly Glu Asp Gly Lys Leu Phe Ile Gly Thr
          225          230          235          240
Ala Val Asp Gly Lys Gln Asp Tyr Phe Pro Thr Leu Ser Ser Arg Lys
          245          250          255
Leu Pro Arg Asp Pro Glu Ser Ser Ala Met Leu Asp Tyr Glu Leu His
          260          265          270
Ser Asp Phe Val Ser Ser Leu Ile Lys Ile Pro Ser Asp Thr Leu Ala
          275          280          285
Leu Val Ser His Phe Asp Ile Phe Tyr Ile Tyr Gly Phe Ala Ser Gly
          290          295          300
Gly Phe Val Tyr Phe Leu Thr Val Gln Pro Glu Thr Pro Glu Gly Val
          305          310          315          320
Ala Ile Asn Ser Ala Gly Asp Leu Phe Tyr Thr Ser Arg Ile Val Arg

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1..txt
325 330 335

Leu Cys Lys Asp Asp Pro Lys Phe His Ser Tyr Val Ser Leu Pro Phe
340 345 350
Gly Cys Thr Arg Ala Gly Val Glu Tyr Arg Leu Leu Gln Ala Ala Tyr
355 360 365
Leu Ala Lys Pro Gly Asp Ser Leu Ala Gln Ala Phe Asn Ile Thr Ser
370 375 380
Gln Asp Asp Val Leu Phe Ala Ile Phe Ser Lys Gly Gln Lys Gln Tyr
385 390 395 400
His His Pro Pro Asp Asp Ser Ala Leu Cys Ala Phe Pro Ile Arg Ala
405 410 415
Ile Asn Leu Gln Ile Lys Glu Arg Leu Gln Ser Cys Tyr Gln Gly Glu
420 425 430
Gly Asn Leu Glu Leu Asn Trp Leu Leu Gly Lys Asp Val Gln Cys Thr
435 440 445
Lys Ala Pro Val Pro Ile Asp Asp Asn Phe Cys Gly Leu Asp Ile Asn
450 455 460
Gln Pro Leu Gly Gly Ser Thr Pro Val Glu Gly Leu Thr Leu Tyr Thr
465 470 475 480
Thr Ser Arg Asp Arg Met Thr Ser Val Ala Ser Tyr Val Tyr Asn Gly
485 490 495
Tyr Ser Val Val Phe Val Gly Thr Lys Ser Gly Lys Leu Lys Lys Val
500 505 510
Arg Val Tyr Glu Phe Arg Cys Ser Asn Ala Ile His Leu Leu Ser Lys
515 520 525
Glu Ser Leu Leu Glu Gly Ser Tyr Trp Trp Arg Phe Asn Tyr Arg Gln
530 535 540
Leu Tyr Phe Leu Gly Glu Gln Arg
545 550

<210> 171

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 171

tggaataaccg cctcctgcag

20

<210> 172

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 172
cttctgccct ttggagaaga tggc

24

<210> 173
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 173
ggactcactg gccaggcct tcaatatcac cagccaggac gat

43

<210> 174
<211> 3106
<212> DNA
<213> Homo sapiens

<220>
<221> modified_base
<222> (1683)..(1683)
<223> a, t, c or g

<400> 174
aggctcccg ggcgaggctga gtgcggactg gagtgggaac ccgggtcccc gcgcttagag 60
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tgctggctcgt cttgggcttc ctgggtgctcc gcaggctgga ctggagcacc ctggccctc 180
tgcggtcccg ccacgacag ctggggctgc aggccaaagg ctggaacttc atgctggagg 240
attccacctt ctggatcttc gggggctcca tccactatct ccgtgtgccc agggagtact 300
ggagggaccg cctgctgaag atgaaggcct gtggcttgaa caccctcacc acctatgttc 360
cgtggaacct gcattgagcca gaaagaggca aatttgactt ctctgggaac ctggacctgg 420
aggccttcgt cctgatggcc gcagagatcg ggctgtgggt gattctgctg ccaggccctc 480
acatctgcag tgagatggac ctcgggggct tgcccagctg gctactccaa gaccctggca 540
tgaggctgag gacaacttac aagggttca ccgaagcagt ggacctttat ttgaccacc 600
tgatgtccag ggtgggtgcca ctccagtaca agcgtggggg acctatcatt gccgtgcagg 660
tgagagaatga atatggttcc tataataaag accccgcata catgccctac gtcaagaagg 720
cactggagga ccgtggcatt gtggaactgc tcctgacttc agacaacaag gatgggctga 780
gcaaggggat tgtccaggga gtcttggtcca ccatcaactt gcagtcaaca cagagctgc 840
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gnggttccct cccagaaaca cccacattac ctgctttctt cttgggtagc ttgtccatca 1740
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gccctgcatt acagttcacg gaaaccccc acctgggcag gaaccagtac attaagttag 1980
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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ctggtggctg ctgccccacc cctcactgca aaagcatctc cttaagtagc aacctcaggg 2100
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<210> 175
 <211> 636
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (539)
 <223> Any amino acid

<400> 175
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 20 25 30
 Ser Thr Leu Val Pro Leu Arg Leu Arg His Arg Gln Leu Gly Leu Gln
 35 40 45
 Ala Lys Gly Trp Asn Phe Met Leu Glu Asp Ser Thr Phe Trp Ile Phe
 50 55 60
 Gly Gly Ser Ile His Tyr Phe Arg Val Pro Arg Glu Tyr Trp Arg Asp
 65 70 75 80
 Arg Leu Leu Lys Met Lys Ala Cys Gly Leu Asn Thr Leu Thr Thr Tyr
 85 90 95
 Val Pro Trp Asn Leu His Glu Pro Glu Arg Gly Lys Phe Asp Phe Ser
 100 105 110
 Gly Asn Leu Asp Leu Glu Ala Phe Val Leu Met Ala Ala Glu Ile Gly
 115 120 125
 Leu Trp Val Ile Leu Arg Pro Gly Pro Tyr Ile Cys Ser Glu Met Asp
 130 135 140
 Leu Gly Gly Leu Pro Ser Trp Leu Leu Gln Asp Pro Gly Met Arg Leu
 145 150 155 160
 Arg Thr Thr Tyr Lys Gly Phe Thr Glu Ala Val Asp Leu Tyr Phe Asp
 165 170 175

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 His Leu Met Ser Arg Val Val Pro Leu Gln Tyr Lys Arg Gly Gly Pro
 180 185 190

Ile Ile Ala Val Gln Val Glu Asn Glu Tyr Gly Ser Tyr Asn Lys Asp
 195 200 205

Pro Ala Tyr Met Pro Tyr Val Lys Lys Ala Leu Glu Asp Arg Gly Ile
 210 215 220

Val Glu Leu Leu Leu Thr Ser Asp Asn Lys Asp Gly Leu Ser Lys Gly
 225 230 235 240

Ile Val Gln Gly Val Leu Ala Thr Ile Asn Leu Gln Ser Thr His Glu
 245 250 255

Leu Gln Leu Leu Thr Thr Phe Leu Phe Asn Val Gln Gly Thr Gln Pro
 260 265 270

Lys Met Val Met Glu Tyr Trp Thr Gly Trp Phe Asp Ser Trp Gly Gly
 275 280 285

Pro His Asn Ile Leu Asp Ser Ser Glu Val Leu Lys Thr Val Ser Ala
 290 295 300

Ile Val Asp Ala Gly Ser Ser Ile Asn Leu Tyr Met Phe His Gly Gly
 305 310 315 320

Thr Asn Phe Gly Phe Met Asn Gly Ala Met His Phe His Asp Tyr Lys
 325 330 335

Ser Asp Val Thr Ser Tyr Asp Tyr Asp Ala Val Leu Thr Glu Ala Gly
 340 345 350

Asp Tyr Thr Ala Lys Tyr Met Lys Leu Arg Asp Phe Phe Gly Ser Ile
 355 360 365

Ser Gly Ile Pro Leu Pro Pro Pro Pro Asp Leu Leu Pro Lys Met Pro
 370 375 380

Tyr Glu Pro Leu Thr Pro Val Leu Tyr Leu Ser Leu Trp Asp Ala Leu
 385 390 395 400

Lys Tyr Leu Gly Glu Pro Ile Lys Ser Glu Lys Pro Ile Asn Met Glu
 405 410 415

Asn Leu Pro Val Asn Gly Gly Asn Gly Gln Ser Phe Gly Tyr Ile Leu
 420 425 430

Tyr Glu Thr Ser Ile Thr Ser Ser Gly Ile Leu Ser Gly His Val His
 435 440 445

Asp Arg Gly Gln Val Phe Val Asn Thr Val Ser Ile Gly Phe Leu Asp
 450 455 460

Tyr Lys Thr Thr Lys Ile Ala Val Pro Leu Ile Gln Gly Tyr Thr Val
 465 470 475 480

Leu Arg Ile Leu Val Glu Asn Arg Gly Arg Val Asn Tyr Gly Glu Asn
 485 490 495

Ile Asp Asp Gln Arg Lys Gly Leu Ile Gly Asn Leu Tyr Leu Asn Asp
 500 505 510

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ser Pro Leu Lys Asn Phe Arg Ile Tyr Ser Leu Asp Met Lys Lys Ser
515 520 525

Phe Phe Gln Arg Phe Gly Leu Asp Lys Trp Xaa Ser Leu Pro Glu Thr
530 535 540

Pro Thr Leu Pro Ala Phe Phe Leu Gly Ser Leu Ser Ile Ser Ser Thr
545 550 555 560

Pro Cys Asp Thr Phe Leu Lys Leu Glu Gly Trp Glu Lys Gly Val Val
565 570 575

Phe Ile Asn Gly Gln Asn Leu Gly Arg Tyr Trp Asn Ile Gly Pro Gln
580 585 590

Lys Thr Leu Tyr Leu Pro Gly Pro Trp Leu Ser Ser Gly Ile Asn Gln
595 600 605

Val Ile Val Phe Glu Glu Thr Met Ala Gly Pro Ala Leu Gln Phe Thr
610 615 620

Glu Thr Pro His Leu Gly Arg Asn Gln Tyr Ile Lys
625 630 635

<210> 176

<211> 2505

<212> DNA

<213> Homo sapiens

<400> 176

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aaggggagca	aagccgggct	cggcccagag	cccccaggac	ctccatctcc	caatgttgga	180
ggaatccgac	acgtgacggt	ctgtccgccc	tctcagacta	gaggagcgct	gtaaacgcca	240
tggtcccaa	gaagctgtcc	tgcttctcgt	ccctgctgct	gccgctcagc	ctgacgctac	300
tgctgcccc	ggcagacact	cggtcggttc	tagtggtatg	gggtcatgac	cggtttctcc	360
tagacggggc	cccgttccgc	tatgtgtctg	gcagcctgca	ctactttcgg	gtaccgcggg	420
tgctttgggc	cgaccggctt	ttgaagatgc	gatggagcgg	cctcaacgcc	atacagtttt	480
atgtgccctg	gaactaccac	gagccacagc	ctggggtcta	taactttaat	ggcagccggg	540
acctcattgc	ctttctgaat	gaggcagctc	tagcgaacct	gttggtcata	ctgagaccag	600
gaccttacat	ctgtgcagag	tgggagatgg	ggggtctccc	atcctgggtg	cttcgaaaac	660
ctgaaattca	tctaagaacc	tcagatccag	acttccttgc	cgcagtggac	tcctggttca	720
aggctcttgc	gcccagaata	tatccatggc	tttatcacia	tgggggcaac	atcattagca	780
ttcaggtgga	gaatgaatat	ggtagctaca	gagcctgtga	cttcagctac	atgaggcact	840
tggtctgggc	cttcctgtgc	ctgctaggag	aaaagatctt	gctcttcacc	acagatgggc	900
ctgaaggact	caagtgtggc	tccctccggg	gactctatac	cactgtagat	tttggcccag	960
ctgacaacat	gacaaaaatc	tttaccctgc	ttcgggaagta	tgaaccccat	gggccattgg	1020
taaactctga	gtactacaca	ggctggctgg	attactgggg	ccagaatcac	tccacacggg	1080
ctgtgtcagc	tgtaacccaa	ggactagaga	acatgctcaa	gttgggagcc	agtgtgaaca	1140
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gcttccttcc	gattactacc	agctatgact	atgatgcacc	tatatctgaa	gcaggggacc	1260
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caatgacctt	tgaggctgtc	aagcaggacc	atggcttcat	gttggtaccga	acctatatga	1500
cccataccat	ttttgagcca	acaccattct	gggtgccaaa	taatggagtc	catgaccgtg	1560
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ggttttccct	ccagttgcca	aaatggccat	atcctcaagc	tccttctggc	cccacattct	1860
actccaaaac	atttccaatt	ttaggctcag	ttggggacac	atttctatat	ctacctggat	1920
ggaccaaggg	ccaagtctgg	atcaatgggt	ttaacttggg	ccggtactgg	acaaagcagg	1980

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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tccagcctgg ctgacagtga gacactccat ctcaaaaaaa aaaaa 2505

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<210> 177
 <211> 654
 <212> PRT
 <213> Homo sapiens

<400> 177

Met Ala Pro Lys Lys Leu Ser Cys Leu Arg Ser Leu Leu Leu Pro Leu
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 20 25 30

Asp Arg Gly His Asp Arg Phe Leu Leu Asp Gly Ala Pro Phe Arg Tyr
 35 40 45

Val Ser Gly Ser Leu His Tyr Phe Arg Val Pro Arg Val Leu Trp Ala
 50 55 60

Asp Arg Leu Leu Lys Met Arg Trp Ser Gly Leu Asn Ala Ile Gln Phe
 65 70 75 80

Tyr Val Pro Trp Asn Tyr His Glu Pro Gln Pro Gly Val Tyr Asn Phe
 85 90 95

Asn Gly Ser Arg Asp Leu Ile Ala Phe Leu Asn Glu Ala Ala Leu Ala
 100 105 110

Asn Leu Leu Val Ile Leu Arg Pro Gly Pro Tyr Ile Cys Ala Glu Trp
 115 120 125

Glu Met Gly Gly Leu Pro Ser Trp Leu Leu Arg Lys Pro Glu Ile His
 130 135 140

Leu Arg Thr Ser Asp Pro Asp Phe Leu Ala Ala Val Asp Ser Trp Phe
 145 150 155 160

Lys Val Leu Leu Pro Lys Ile Tyr Pro Trp Leu Tyr His Asn Gly Gly
 165 170 175

Asn Ile Ile Ser Ile Gln Val Glu Asn Glu Tyr Gly Ser Tyr Arg Ala
 180 185 190

Cys Asp Phe Ser Tyr Met Arg His Leu Ala Gly Leu Phe Arg Ala Leu
 195 200 205

Leu Gly Glu Lys Ile Leu Leu Phe Thr Thr Asp Gly Pro Glu Gly Leu
 210 215 220

Lys Cys Gly Ser Leu Arg Gly Leu Tyr Thr Thr Val Asp Phe Gly Pro
 225 230 235 240

Ala Asp Asn Met Thr Lys Ile Phe Thr Leu Leu Arg Lys Tyr Glu Pro
 245 250 255

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

His Gly Pro Leu Val Asn Ser Glu Tyr Tyr Thr Gly Trp Leu Asp Tyr
 260 265 270
 Trp Gly Gln Asn His Ser Thr Arg Ser Val Ser Ala Val Thr Lys Gly
 275 280 285
 Leu Glu Asn Met Leu Lys Leu Gly Ala Ser Val Asn Met Tyr Met Phe
 290 295 300
 His Gly Gly Thr Asn Phe Gly Tyr Trp Asn Gly Ala Asp Lys Lys Gly
 305 310 315 320
 Arg Phe Leu Pro Ile Thr Thr Ser Tyr Asp Tyr Asp Ala Pro Ile Ser
 325 330 335
 Glu Ala Gly Asp Pro Thr Pro Lys Leu Phe Ala Leu Arg Asp Val Ile
 340 345 350
 Ser Lys Phe Gln Glu Val Pro Leu Gly Pro Leu Pro Pro Pro Ser Pro
 355 360 365
 Lys Met Met Leu Gly Pro Val Thr Leu His Leu Val Gly His Leu Leu
 370 375 380
 Ala Phe Leu Asp Leu Leu Cys Pro Arg Gly Pro Ile His Ser Ile Leu
 385 390 395 400
 Pro Met Thr Phe Glu Ala Val Lys Gln Asp His Gly Phe Met Leu Tyr
 405 410 415
 Arg Thr Tyr Met Thr His Thr Ile Phe Glu Pro Thr Pro Phe Trp Val
 420 425 430
 Pro Asn Asn Gly Val His Asp Arg Ala Tyr Val Met Val Asp Gly Val
 435 440 445
 Phe Gln Gly Val Val Glu Arg Asn Met Arg Asp Lys Leu Phe Leu Thr
 450 455 460
 Gly Lys Leu Gly Ser Lys Leu Asp Ile Leu Val Glu Asn Met Gly Arg
 465 470 475 480
 Leu Ser Phe Gly Ser Asn Ser Ser Asp Phe Lys Gly Leu Leu Lys Pro
 485 490 495
 Pro Ile Leu Gly Gln Thr Ile Leu Thr Gln Trp Met Met Phe Pro Leu
 500 505 510
 Lys Ile Asp Asn Leu Val Lys Trp Trp Phe Pro Leu Gln Leu Pro Lys
 515 520 525
 Trp Pro Tyr Pro Gln Ala Pro Ser Gly Pro Thr Phe Tyr Ser Lys Thr
 530 535 540
 Phe Pro Ile Leu Gly Ser Val Gly Asp Thr Phe Leu Tyr Leu Pro Gly
 545 550 555 560
 Trp Thr Lys Gly Gln Val Trp Ile Asn Gly Phe Asn Leu Gly Arg Tyr
 565 570 575
 Trp Thr Lys Gln Gly Pro Gln Gln Thr Leu Tyr Val Pro Arg Phe Leu
 580 585 590

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Phe Pro Arg Gly Ala Leu Asn Lys Ile Thr Leu Leu Glu Leu Glu
595 600 605

Asp Val Pro Leu Gln Pro Gln Val Gln Phe Leu Asp Lys Pro Ile Leu
610 615 620

Asn Ser Thr Ser Thr Leu His Arg Thr His Ile Asn Ser Leu Ser Ala
625 630 635 640

Asp Thr Leu Ser Ala Ser Glu Pro Met Glu Leu Ser Gly His
645 650

<210> 178

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 178

tggctactcc aagaccctgg catg

24

<210> 179

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 179

tggacaaatc cccttgctca gccc

24

<210> 180

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 180

gggcttcacc gaagcagtgg acctttatatt tgaccacctg atgtccaggg

50

<210> 181

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 181

ccagctatga ctatgatgca cc

22

<210> 182

<211> 24

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 182

tggcaccag aatggtgttg gctc

24

<210> 183

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 183

cgagatgtca tcagcaagtt ccaggaagtt cctttgggac ctttacctcc

50

<210> 184

<211> 1947

<212> DNA

<213> Homo sapiens

<400> 184

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aggggaaggaa aaattataat cactaatctt gggtcttttt aaattgtttg taacttggat 1860
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<210> 185

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 501

<212> PRT

<213> Homo sapiens

<400> 185

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Met Ala Tyr Met Leu Lys Lys Leu Leu Ile Ser Tyr Ile Ser Ile Ile
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Cys Val Tyr Gly Phe Ile Cys Leu Tyr Thr Leu Phe Trp Leu Phe Arg
          20          25          30

Ile Pro Leu Lys Glu Tyr Ser Phe Glu Lys Val Arg Glu Glu Ser Ser
          35          40          45

Phe Ser Asp Ile Pro Asp Val Lys Asn Asp Phe Ala Phe Leu Leu His
          50          55          60

Met Val Asp Gln Tyr Asp Gln Leu Tyr Ser Lys Arg Phe Gly Val Phe
 65          70          75          80

Leu Ser Glu Val Ser Glu Asn Lys Leu Arg Glu Ile Ser Leu Asn His
          85          90          95

Glu Trp Thr Phe Glu Lys Leu Arg Gln His Ile Ser Arg Asn Ala Gln
          100          105          110

Asp Lys Gln Glu Leu His Leu Phe Met Leu Ser Gly Val Pro Asp Ala
          115          120          125

Val Phe Asp Leu Thr Asp Leu Asp Val Leu Lys Leu Glu Leu Ile Pro
          130          135          140

Glu Ala Lys Ile Pro Ala Lys Ile Ser Gln Met Thr Asn Leu Gln Glu
          145          150          155          160

Leu His Leu Cys His Cys Pro Ala Lys Val Glu Gln Thr Ala Phe Ser
          165          170          175

Phe Leu Arg Asp His Leu Arg Cys Leu His Val Lys Phe Thr Asp Val
          180          185          190

Ala Glu Ile Pro Ala Trp Val Tyr Leu Leu Lys Asn Leu Arg Glu Leu
          195          200          205

Tyr Leu Ile Gly Asn Leu Asn Ser Glu Asn Asn Lys Met Ile Gly Leu
          210          215          220

Glu Ser Leu Arg Glu Leu Arg His Leu Lys Ile Leu His Val Lys Ser
          225          230          235          240

Asn Leu Thr Lys Val Pro Ser Asn Ile Thr Asp Val Ala Pro His Leu
          245          250          255

Thr Lys Leu Val Ile His Asn Asp Gly Thr Lys Leu Leu Val Leu Asn
          260          265          270

Ser Leu Lys Lys Met Met Asn Val Ala Glu Leu Glu Leu Gln Asn Cys
          275          280          285

Glu Leu Glu Arg Ile Pro His Ala Ile Phe Ser Leu Ser Asn Leu Gln
          290          295          300

Glu Leu Asp Leu Lys Ser Asn Asn Ile Arg Thr Ile Glu Glu Ile Ile

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

305 310 315 320
 Ser Phe Gln His Leu Lys Arg Leu Thr Cys Leu Lys Leu Trp His Asn
 325 330 335
 Lys Ile Val Thr Ile Pro Pro Ser Ile Thr His Val Lys Asn Leu Glu
 340 345 350
 Ser Leu Tyr Phe Ser Asn Asn Lys Leu Glu Ser Leu Pro Val Ala Val
 355 360 365
 Phe Ser Leu Gln Lys Leu Arg Cys Leu Asp Val Ser Tyr Asn Asn Ile
 370 375 380
 Ser Met Ile Pro Ile Glu Ile Gly Leu Leu Gln Asn Leu Gln His Leu
 385 390 395 400
 His Ile Thr Gly Asn Lys Val Asp Ile Leu Pro Lys Gln Leu Phe Lys
 405 410 415
 Cys Ile Lys Leu Arg Thr Leu Asn Leu Gly Gln Asn Cys Ile Thr Ser
 420 425 430
 Leu Pro Glu Lys Val Gly Gln Leu Ser Gln Leu Thr Gln Leu Glu Leu
 435 440 445
 Lys Gly Asn Cys Leu Asp Arg Leu Pro Ala Gln Leu Gly Gln Cys Arg
 450 455 460
 Met Leu Lys Lys Ser Gly Leu Val Val Glu Asp His Leu Phe Asp Thr
 465 470 475 480
 Leu Pro Leu Glu Val Lys Glu Ala Leu Asn Gln Asp Ile Asn Ile Pro
 485 490 495
 Phe Ala Asn Gly Ile
 500

<210> 186
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 186
 cctccctcta ttacccatgt c 21

<210> 187
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 187
 gaccaacttt ctctgggagt gagg 24

<210> 188

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 188

gtcactttat ttctctaaca acaagctcga atccttacca gtggcag

47

<210> 189

<211> 2917

<212> DNA

<213> Homo sapiens

<400> 189

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cccacgcgtc cggccttctc tctggacttt gcatttccat tccttttcat tgacaaactg 60
acttttttta tttctttttt tccatctctg ggccagcttg ggatcctagg ccgccctggg 120
aagacatttg tgttttacac acataaggat ctgtgttttg ggtttcttct tcctcccctg 180
acattggcat tgcttagtgg ttgtgtgggg agggagacca cgtgggctca gtgcttgctt 240
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atcgctgggtg gtatcctggc ggccttgctc ctgctgatag ttgtcgtgct ctgtctttac 360
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tcttgtcctg ccctgcagtg ctgtgaagga tatagaatgt gtgccagttt tgattccctg 540
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agaagaaagg cacagctccc catcagtttc atggaaaata actcagtgcc tgctgggaac 720
cagctgtctg agatccttac agagagcttc cactgggggc aacccttcca ggaaggagtt 780
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gctgatgtaa cacagagcct ataaaagctg tcggtcctta aggctgcca gcgccttgcc 960
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cagattattg tgaagtgtga aatgggacat aattctacag tggagataat atacataaca 2100
gaagatgatg taatacaaa tcaaaatgca ctgggcaaat ataaccag catggctctt 2160
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ctgaaaagg atcgaagtgc aagtggcaat tcaggatttc agcatgaaac acatgcggaa 2640
gaaactccaa accagccttt caacagtgtg catctgtttt ccttcatggg tctagctctg 2700
aatgtggtga ctgtagcgac aatcacagtg aggcattttg taaatcaacg ggcagactac 2760

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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 ggcctgaaag tgacacacag gcctgcatgt aaaaaaa 2917

<210> 190
 <211> 607
 <212> PRT
 <213> Homo sapiens

<400> 190
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 1 5 10 15
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 20 25 30
 Thr Val Ser Leu Gly Gly Ala Asn Met Ala Glu Thr His Lys Ala Met
 35 40 45
 Ile Leu Gln Leu Asn Pro Ser Glu Asn Cys Thr Trp Thr Ile Glu Arg
 50 55 60
 Pro Glu Asn Lys Ser Ile Arg Ile Ile Phe Ser Tyr Val Gln Leu Asp
 65 70 75 80
 Pro Asp Gly Ser Cys Glu Ser Glu Asn Ile Lys Val Phe Asp Gly Thr
 85 90 95
 Ser Ser Asn Gly Pro Leu Leu Gly Gln Val Cys Ser Lys Asn Asp Tyr
 100 105 110
 Val Pro Val Phe Glu Ser Ser Ser Ser Thr Leu Thr Phe Gln Ile Val
 115 120 125
 Thr Asp Ser Ala Arg Ile Gln Arg Thr Val Phe Val Phe Tyr Tyr Phe
 130 135 140
 Phe Ser Pro Asn Ile Ser Ile Pro Asn Cys Gly Gly Tyr Leu Asp Thr
 145 150 155 160
 Leu Glu Gly Ser Phe Thr Ser Pro Asn Tyr Pro Lys Pro His Pro Glu
 165 170 175
 Leu Ala Tyr Cys Val Trp His Ile Gln Val Glu Lys Asp Tyr Lys Ile
 180 185 190
 Lys Leu Asn Phe Lys Glu Ile Phe Leu Glu Ile Asp Lys Gln Cys Lys
 195 200 205
 Phe Asp Phe Leu Ala Ile Tyr Asp Gly Pro Ser Thr Asn Ser Gly Leu
 210 215 220
 Ile Gly Gln Val Cys Gly Arg Val Thr Pro Thr Phe Glu Ser Ser Ser
 225 230 235 240
 Asn Ser Leu Thr Val Val Leu Ser Thr Asp Tyr Ala Asn Ser Tyr Arg
 245 250 255
 Gly Phe Ser Ala Ser Tyr Thr Ser Ile Tyr Ala Glu Asn Ile Asn Thr
 260 265 270
 Thr Ser Leu Thr Cys Ser Ser Asp Arg Met Arg Val Ile Ile Ser Lys
 275 280 285

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ser Tyr Leu Glu Ala Phe Asn Ser Asn Gly Asn Asn Leu Gln Leu Lys
 290 295 300
 Asp Pro Thr Cys Arg Pro Lys Leu Ser Asn Val Val Glu Phe Ser Val
 305 310 315 320
 Pro Leu Asn Gly Cys Gly Thr Ile Arg Lys Val Glu Asp Gln Ser Ile
 325 330 335
 Thr Tyr Thr Asn Ile Ile Thr Phe Ser Ala Ser Ser Thr Ser Glu Val
 340 345 350
 Ile Thr Arg Gln Lys Gln Leu Gln Ile Ile Val Lys Cys Glu Met Gly
 355 360 365
 His Asn Ser Thr Val Glu Ile Ile Tyr Ile Thr Glu Asp Asp Val Ile
 370 375 380
 Gln Ser Gln Asn Ala Leu Gly Lys Tyr Asn Thr Ser Met Ala Leu Phe
 385 390 395 400
 Glu Ser Asn Ser Phe Glu Lys Thr Ile Leu Glu Ser Pro Tyr Tyr Val
 405 410 415
 Asp Leu Asn Gln Thr Leu Phe Val Gln Val Ser Leu His Thr Ser Asp
 420 425 430
 Pro Asn Leu Val Val Phe Leu Asp Thr Cys Arg Ala Ser Pro Thr Ser
 435 440 445
 Asp Phe Ala Ser Pro Thr Tyr Asp Leu Ile Lys Ser Gly Cys Ser Arg
 450 455 460
 Asp Glu Thr Cys Lys Val Tyr Pro Leu Phe Gly His Tyr Gly Arg Phe
 465 470 475 480
 Gln Phe Asn Ala Phe Lys Phe Leu Arg Ser Met Ser Ser Val Tyr Leu
 485 490 495
 Gln Cys Lys Val Leu Ile Cys Asp Ser Ser Asp His Gln Ser Arg Cys
 500 505 510
 Asn Gln Gly Cys Val Ser Arg Ser Lys Arg Asp Ile Ser Ser Tyr Lys
 515 520 525
 Trp Lys Thr Asp Ser Ile Ile Gly Pro Ile Arg Leu Lys Arg Asp Arg
 530 535 540
 Ser Ala Ser Gly Asn Ser Gly Phe Gln His Glu Thr His Ala Glu Glu
 545 550 555 560
 Thr Pro Asn Gln Pro Phe Asn Ser Val His Leu Phe Ser Phe Met Val
 565 570 575
 Leu Ala Leu Asn Val Val Thr Val Ala Thr Ile Thr Val Arg His Phe
 580 585 590
 Val Asn Gln Arg Ala Asp Tyr Lys Tyr Gln Lys Leu Gln Asn Tyr
 595 600 605

<210> 191

<211> 21

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 191

tctctattcc aaactgtggc g

21

<210> 192

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 192

tttgatgacg attcgaaggt gg

22

<210> 193

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 193

ggaaggatcc ttcaccagcc ccaattaccc aaagccgcat cctgagc

47

<210> 194

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 194

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cgggacatgc	ggccccagga	gctccccagg	ctcgcgttcc	cggtgctgct	gttgctgttg	120
ctgctgctgc	cgccgcgcgc	gtgcccgtgc	cacagcgcca	cgcgcttcga	ccccacctgg	180
gagtcctctg	acgcccgcga	gctgcccgcg	tggtttgacc	aggccaagtt	cggcatcttc	240
atccactggg	gagtggtttc	cgtagcccagc	ttcggtagcg	agtgggtctg	gtggtatttg	300
caaaaggaaa	agataccgaa	gtatgtggaa	tttatgaaag	ataattaccc	tcctagtttc	360
aaatatgaag	attttgagcc	actattttaca	gcaaaatfff	ttaatgccaa	ccagtgggca	420
gatatttttc	aggcctctgg	tgccaaatac	attgtcttaa	cttccaaaca	tcatgaaggc	480
tttaccttgt	gggggtcaga	atattcgtgg	aactggaatg	ccatagatga	ggggcccaag	540
agggacattg	tcaaggaact	tgaggtagcc	attaggaaca	gaactgacct	gcgttttgga	600
ctgtactatt	ccctttttga	atggtttcat	ccgctcttcc	ttgaggatga	atccagttca	660
ttccataagc	ggcaatttcc	agtttctaag	acattgccag	agctctatga	gttagtgaac	720
aactatcagc	ctgaggttct	gtggtcggat	ggtgacggag	gagcaccgga	tcaatactgg	780
aacagcacag	gcttcttggc	ctggttatat	aatgaaagcc	cagttcgggg	cacagtagtc	840
accaatgata	ggtggggagc	tggtagcatc	tgtaagcatg	gtggcttcta	tacctgcagt	900
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aaactgtcct	ggggctatag	gagggaaagt	ggaatctctg	actatcttac	aattgaagaa	1020
ttggtgaagc	aacttgttaga	gacagtttca	tgtggaggaa	atcttttgat	gaatattggg	1080
cccacactag	atggcaccat	ttctgtagtt	tttgaggagc	gactgaggca	agtgggggtc	1140
tggtctaaaag	tcaatggaga	agctattttat	gaaacctata	cctggcgatc	ccagaatgac	1200
actgtcacc	cagatgtgtg	gtacacatcc	aagcctaaag	aaaaattagt	ctatgccatt	1260
tttcttaaat	ggccacatc	aggacagctg	ttccttggcc	atcccaaagc	tattctgggg	1320
gcaacagagg	tgaaactact	gggccatgga	cagccactta	actggatttc	tttgagagca	1380

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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aatggcatta tggtagaact gccacagcta accattcatc agatgccgtg taaatggggc 1440
tgggctctag ccctaactaa tgtgatctaa agtgcagcag agtggctgat gctgcaagtt 1500
atgtctaagg ctaggaacta tcaggtgtct ataattgtag cacatggaga aagcaatgta 1560
aactggataa gaaaattatt tggcagttca gccctttccc tttttccac taaatttttc 1620
ttaaattacc catgtaacca tttaactct ccagtgcact ttgccattaa agtctcttca 1680
cattgatttg tttccatgtg tgactcagag gtgagaattt tttcacatta tagtagcaag 1740
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tatatagtta tgcatcactt aatatgggga tattttctgg gaaatgcatt gctagtcaat 1860
ttttttttgt gccaacatca tagagtgtat ttacaaaatc ctagatggca tagcctacta 1920
cacacctaag gtgtatggta tagactgttg ctcttaggct acagacatat acagcatgtt 1980
actgaatact gtaggcaata gtaacagtgg tatttgtata tcgaaacata tggaaacata 2040
gagaaggtag agtaaaaaa ctgtaaaaa aatggtgcac ctgtataggg cacttaccac 2100
gaatggagct tacaggactg gaagttgctc tgggtgagtc agtgagtga tgtgaaggcc 2160
taggaacatta ttgaacactg ccagacgtta taaatactgt atgcttaggc tacactacat 2220
ttataaaaaa aagtttttct ttcttcaatt ataaattaac ataagtgtac tgtaacttta 2280
caaacgtttt aattttttaa acctttttgg ctctttttgta ataacactta gcttaaaaca 2340
taaactcatt gtgcaaatgt aa 2362

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<210> 195
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 195

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Met Arg Pro Gln Glu Leu Pro Arg Leu Ala Phe Pro Leu Leu Leu Leu
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Leu Leu Leu Leu Leu Pro Pro Pro Pro Cys Pro Ala His Ser Ala Thr
          20          25          30
Arg Phe Asp Pro Thr Trp Glu Ser Leu Asp Ala Arg Gln Leu Pro Ala
          35          40          45
Trp Phe Asp Gln Ala Lys Phe Gly Ile Phe Ile His Trp Gly Val Phe
          50          55          60
Ser Val Pro Ser Phe Gly Ser Glu Trp Phe Trp Trp Tyr Trp Gln Lys
          65          70          75          80
Glu Lys Ile Pro Lys Tyr Val Glu Phe Met Lys Asp Asn Tyr Pro Pro
          85          90          95
Ser Phe Lys Tyr Glu Asp Phe Gly Pro Leu Phe Thr Ala Lys Phe Phe
          100          105          110
Asn Ala Asn Gln Trp Ala Asp Ile Phe Gln Ala Ser Gly Ala Lys Tyr
          115          120          125
Ile Val Leu Thr Ser Lys His His Glu Gly Phe Thr Leu Trp Gly Ser
          130          135          140
Glu Tyr Ser Trp Asn Trp Asn Ala Ile Asp Glu Gly Pro Lys Arg Asp
          145          150          155          160
Ile Val Lys Glu Leu Glu Val Ala Ile Arg Asn Arg Thr Asp Leu Arg
          165          170          175
Phe Gly Leu Tyr Tyr Ser Leu Phe Glu Trp Phe His Pro Leu Phe Leu
          180          185          190
Glu Asp Glu Ser Ser Ser Phe His Lys Arg Gln Phe Pro Val Ser Lys
          195          200          205

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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Leu Trp Ser Asp Gly Asp Gly Gly Ala Pro Asp Gln Tyr Trp Asn Ser
 225 230 235 240

Thr Gly Phe Leu Ala Trp Leu Tyr Asn Glu Ser Pro Val Arg Gly Thr
 245 250 255

Val Val Thr Asn Asp Arg Trp Gly Ala Gly Ser Ile Cys Lys His Gly
 260 265 270

Gly Phe Tyr Thr Cys Ser Asp Arg Tyr Asn Pro Gly His Leu Leu Pro
 275 280 285

His Lys Trp Glu Asn Cys Met Thr Ile Asp Lys Leu Ser Trp Gly Tyr
 290 295 300

Arg Arg Glu Ala Gly Ile Ser Asp Tyr Leu Thr Ile Glu Glu Leu Val
 305 310 315 320

Lys Gln Leu Val Glu Thr Val Ser Cys Gly Gly Asn Leu Leu Met Asn
 325 330 335

Ile Gly Pro Thr Leu Asp Gly Thr Ile Ser Val Val Phe Glu Glu Arg
 340 345 350

Leu Arg Gln Val Gly Ser Trp Leu Lys Val Asn Gly Glu Ala Ile Tyr
 355 360 365

Glu Thr Tyr Thr Trp Arg Ser Gln Asn Asp Thr Val Thr Pro Asp Val
 370 375 380

Trp Tyr Thr Ser Lys Pro Lys Glu Lys Leu Val Tyr Ala Ile Phe Leu
 385 390 395 400

Lys Trp Pro Thr Ser Gly Gln Leu Phe Leu Gly His Pro Lys Ala Ile
 405 410 415

Leu Gly Ala Thr Glu Val Lys Leu Leu Gly His Gly Gln Pro Leu Asn
 420 425 430

Trp Ile Ser Leu Glu Gln Asn Gly Ile Met Val Glu Leu Pro Gln Leu
 435 440 445

Thr Ile His Gln Met Pro Cys Lys Trp Gly Trp Ala Leu Ala Leu Thr
 450 455 460

Asn Val Ile
 465

<210> 196

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 196

tggtttgacc aggccaagtt cgg

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 197

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 197

ggattcatcc tcaaggaaga gcgg

24

<210> 198

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 198

aacttgagc atcagccact ctgc

24

<210> 199

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 199

ttccgtgccc agcttcggtg gcgagtggtt ctggtggtat tggca

45

<210> 200

<211> 2372

<212> DNA

<213> Homo sapiens

<400> 200

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gttccagaac	tctccatccg	gactagttat	tgagcatctg	cctctcatat	caccagtggc	120
catctgaggt	gtttcccttg	ctctgaaggg	gtaggcacga	tggccagggtg	cttcagcctg	180
gtgttgcttc	tcacttccat	ctggaccacg	aggctcctgg	tccaaggctc	tttgcggtgca	240
gaagagcttt	ccatccaggt	gtcatgcaga	attatgggga	tcacccttgt	gagcaaaaaag	300
gcgaaccagc	agctgaattt	cacagaagct	aaggaggcct	gtaggctgct	gggactaagt	360
ttggccggca	aggaccaagt	tgaaacagcc	ttgaaagcta	gctttgaaac	ttgcagctat	420
ggctggggtg	gagatggatt	cgtgggtcatc	tctaggatta	gcccacaccc	caagtgtggg	480
aaaaatgggg	tgggtgtcct	gattttggaag	gttccagtga	gccgacagtt	tgacgcctat	540
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gatcccatat	tcaacactca	aactgcaaca	caaacaacag	aattttattgt	cagtgcagct	660
acctactcgg	tggcatcccc	ttactctaca	atacctgccc	ctactactac	tcctcctgct	720
ccagcttcca	cttctattcc	acggagaaaa	aaattgattt	gtgtcacaga	agtttttatg	780
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aagagtccaa	gcaaaactac	cgtgcgatgc	ctggaagctg	aagtttagat	gagacagaaa	1140
tgaggagaca	cacctgaggc	tggtttcttt	catgctcctt	accctgcccc	agctggggaa	1200
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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caaggagtca ctgagaccacaa ggctttctct actgattccg cagctcagac cctttcttca 1560
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tctctgtaaa gctaaaataa agaaatagaa caaggctgag gatacgacag tacactgtca 1740
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cactgtttag aacacacaca cttacttttt ctgggtctcta ccactgtctga tatttttctt 1860
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gagttacaga aatgattact aaggaagatt actcagtaat ttgttttaaaa agtaataaaa 1980
ttcaacaaac atttctgtaa tagctactat atgtcaagtg ctgtgcaagg tattacactc 2040
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<210> 201

<211> 322

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic protein

<400> 201

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          20          25          30
Gln Val Ser Cys Arg Ile Met Gly Ile Thr Leu Val Ser Lys Lys Ala
      35          40          45
Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala Cys Arg Leu Leu
      50          55          60
Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu Thr Ala Leu Lys Ala
      65          70          75          80
Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val Gly Asp Gly Phe Val Val
          85          90          95
Ile Ser Arg Ile Ser Pro Asn Pro Lys Cys Gly Lys Asn Gly Val Gly
      100          105          110
Val Leu Ile Trp Lys Val Pro Val Ser Arg Gln Phe Ala Ala Tyr Cys
      115          120          125
Tyr Asn Ser Ser Asp Thr Trp Thr Asn Ser Cys Ile Pro Glu Ile Ile
      130          135          140
Thr Thr Lys Asp Pro Ile Phe Asn Thr Gln Thr Ala Thr Gln Thr Thr
      145          150          155          160
Glu Phe Ile Val Ser Asp Ser Thr Tyr Ser Val Ala Ser Pro Tyr Ser
          165          170          175
Thr Ile Pro Ala Pro Thr Thr Thr Pro Pro Ala Pro Ala Ser Thr Ser

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
180 185 190

Ile Pro Arg Arg Lys Lys Leu Ile Cys Val Thr Glu Val Phe Met Glu
195 200 205
Thr Ser Thr Met Ser Thr Glu Thr Glu Pro Phe Val Glu Asn Lys Ala
210 215 220
Ala Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu
225 230 235 240
Leu Val Leu Ala Leu Leu Phe Phe Gly Ala Ala Ala Gly Leu Gly Phe
245 250 255
Cys Tyr Val Lys Arg Tyr Val Lys Ala Phe Pro Phe Thr Asn Lys Asn
260 265 270
Gln Gln Lys Glu Met Ile Glu Thr Lys Val Val Lys Glu Glu Lys Ala
275 280 285
Asn Asp Ser Asn Pro Asn Glu Glu Ser Lys Lys Thr Asp Lys Asn Pro
290 295 300
Glu Glu Ser Lys Ser Pro Ser Lys Thr Thr Val Arg Cys Leu Glu Ala
305 310 315 320
Glu Val

<210> 202
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 202
gagctttcca tccaggtgtc atgc

24

<210> 203
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 203
gtcagtgaca gtacctactc gg

22

<210> 204
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 204

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 24

<210> 205
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 205
 aggaggcctg taggctgctg ggactaagtt tggccggcaa ggaccaagtt 50

<210> 206
 <211> 1620
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (973)..(973)
 <223> a, t, c or g

<220>
 <221> modified_base
 <222> (977)..(977)
 <223> a, t, c or g

<220>
 <221> modified_base
 <222> (996)..(996)
 <223> a, t, c or g

<220>
 <221> modified_base
 <222> (1003)..(1003)
 <223> a, t, c or g

<400> 206
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 ggaaactgcc gccgctctgc cacggtctgc ccaccaacg cgaagacggt aaccctgtgt 180
 actttgactg gagagaagtg gagatcctga tgtttctcag tgccattgtg atgatgaaga 240
 accgcagatc catcactgtg gagcaacata taggcaacat tttcatgttt agtaaagtgg 300
 ccaacacaat tcttttcttc cgcttgata ttcgatggg cctactttac atcacactct 360
 gcatagtgtt cctgatgacg tgcaaacccc ccctatatat gggccctgag tatatcaagt 420
 acttcaatga taaaaccatt gatgaggaac tagaacggga caagagggtc acttggattg 480
 tggagtctt tgccaattgg tctaattgact gccaatcatt tgcccctatc tatgctgacc 540
 tctcccttaa atacaactgt acagggctaa attttgggaa ggtggatgtt ggacgctata 600
 ctgatgttag tacgcggtac aaagttagca catcaccctt caccaagcaa ctccctaccc 660
 tgatcctgtt ccaagggtggc aaggaggcaa tgcggcggcc acagattgac aagaaaggag 720
 gggctgtctc atggaccctt tctgaggaga atgtgatccg agaatttaac ttaaatgagc 780
 tataccagcg ggccaagaaa ctatcaaagg ctggagacaa tatccctgag gaggcagcctg 840
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 tgtggccaac tgtttctctg gagcaagaaa gagatctcat aggacggagg gggaaatggt 1140
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 tttctccatg aaactctgtg gtttcatcat tccttcttag ttgacctgca cagcttggtt 1260
 agacctagat ttaaccctaa ggtaagatgc tggggtatag aacgctaaga attttcccc 1320
 aaggactctt gcttccttaa gcccttctgg cttcgtttat ggtcttcatt aaaagtataa 1380

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

gcctaacttt gtcgctagtc ctaaggagaa acctttaacc acaaagtttt tatcattgaa 1440
gacaatattg aacaaccccc tattttgtgg ggattgagaa ggggtgaata gaggccttgag 1500
actttccttt gtgtggtagg acttggagga gaaatcccct ggactttcac taaccctctg 1560
acatactccc cacaccagtg tgatggcttt ccgtaataaa aagattggga tttccttttg 1620

<210> 207
<211> 296
<212> PRT
<213> Homo sapiens

<400> 207
Met Ala Val Leu Ala Pro Leu Ile Ala Leu Val Tyr Ser Val Pro Arg
1 5 10 15
Leu Ser Arg Trp Leu Ala Gln Pro Tyr Tyr Leu Leu Ser Ala Leu Leu
20 25 30
Ser Ala Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu Cys His Gly
35 40 45
Leu Pro Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp Phe Asp Trp Arg
50 55 60
Glu Val Glu Ile Leu Met Phe Leu Ser Ala Ile Val Met Met Lys Asn
65 70 75 80
Arg Arg Ser Ile Thr Val Glu Gln His Ile Gly Asn Ile Phe Met Phe
85 90 95
Ser Lys Val Ala Asn Thr Ile Leu Phe Phe Arg Leu Asp Ile Arg Met
100 105 110
Gly Leu Leu Tyr Ile Thr Leu Cys Ile Val Phe Leu Met Thr Cys Lys
115 120 125
Pro Pro Leu Tyr Met Gly Pro Glu Tyr Ile Lys Tyr Phe Asn Asp Lys
130 135 140
Thr Ile Asp Glu Glu Leu Glu Arg Asp Lys Arg Val Thr Trp Ile Val
145 150 155 160
Glu Phe Phe Ala Asn Trp Ser Asn Asp Cys Gln Ser Phe Ala Pro Ile
165 170 175
Tyr Ala Asp Leu Ser Leu Lys Tyr Asn Cys Thr Gly Leu Asn Phe Gly
180 185 190
Lys Val Asp Val Gly Arg Tyr Thr Asp Val Ser Thr Arg Tyr Lys Val
195 200 205
Ser Thr Ser Pro Leu Thr Lys Gln Leu Pro Thr Leu Ile Leu Phe Gln
210 215 220
Gly Gly Lys Glu Ala Met Arg Arg Pro Gln Ile Asp Lys Lys Gly Arg
225 230 235 240
Ala Val Ser Trp Thr Phe Ser Glu Glu Asn Val Ile Arg Glu Phe Asn
245 250 255
Leu Asn Glu Leu Tyr Gln Arg Ala Lys Lys Leu Ser Lys Ala Gly Asp
260 265 270
Asn Ile Pro Glu Glu Gln Pro Val Ala Ser Thr Pro Thr Thr Val Ser

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
275 280 285

Asp Gly Glu Asn Lys Lys Asp Lys
290 295

<210> 208

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 208

gcttgatata tcgcatgggc ctac

24

<210> 209

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 209

tggagacaat atccctgagg

20

<210> 210

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 210

aacagttggc cacagcatgg cagg

24

<210> 211

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 211

ccattgatga ggaactagaa cgggacaaga gggtcacttg gattgtggag

50

<210> 212

<211> 1985

<212> DNA

<213> Homo sapiens

<400> 212

ggacagctcg cggccccga gagctctagc cgtcaggag ctgcctgggg acgtttgccc 60
tggggcccca gcctggccc ggtcaccctg gcatgaggag atgggcctgt tgctcctggg 120
cccattgctc ctgctgccc gctcctacgg actgcccttc tacaacggct tctactactc 180
caacagcgcc aacgaccaga acctaggcaa cggtcattgc aaagacctcc ttaatggagt 240

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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gaagctggtg gtggagacac ccgaggagac cctgttcacc taccaagggg ccagtgtgat 300
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atggtggaag ctgtcggaga acggggcccc agagaaggac gtgctggtgg ccatcgggct 420
gaggcaccgc tcctttgggg actaccaagg ccgcgtgcac ctgctggcagg acaaagagca 480
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aggggcccctc aggtgtgtgt actttggaca ataaatggtg ctatgactgc cttccgcaa 1860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1980
aaaaaa

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<210> 213
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 213
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 1 5 10 15
 Gly Leu Pro Phe Tyr Asn Gly Phe Tyr Tyr Ser Asn Ser Ala Asn Asp
 20 25 30
 Gln Asn Leu Gly Asn Gly His Gly Lys Asp Leu Leu Asn Gly Val Lys
 35 40 45
 Leu Val Val Glu Thr Pro Glu Glu Thr Leu Phe Thr Tyr Gln Gly Ala
 50 55 60
 Ser Val Ile Leu Pro Cys Arg Tyr Arg Tyr Glu Pro Ala Leu Val Ser
 65 70 75 80
 Pro Arg Arg Val Arg Val Lys Trp Trp Lys Leu Ser Glu Asn Gly Ala
 85 90 95
 Pro Glu Lys Asp Val Leu Val Ala Ile Gly Leu Arg His Arg Ser Phe
 100 105 110
 Gly Asp Tyr Gln Gly Arg Val His Leu Arg Gln Asp Lys Glu His Asp
 115 120 125
 Val Ser Leu Glu Ile Gln Asp Leu Arg Leu Glu Asp Tyr Gly Arg Tyr
 130 135 140

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Arg Cys Glu Val Ile Asp Gly Leu Glu Asp Glu Ser Gly Leu Val Glu
145 150 155 160
Leu Glu Leu Arg Gly Val Val Phe Pro Tyr Gln Ser Pro Asn Gly Arg
165 170 175
Tyr Gln Phe Asn Phe His Glu Gly Gln Gln Val Cys Ala Glu Gln Ala
180 185 190
Ala Val Val Ala Ser Phe Glu Gln Leu Phe Arg Ala Trp Glu Glu Gly
195 200 205
Leu Asp Trp Cys Asn Ala Gly Trp Leu Gln Asp Ala Thr Val Gln Tyr
210 215 220
Pro Ile Met Leu Pro Arg Gln Pro Cys Gly Gly Pro Gly Leu Ala Pro
225 230 235 240
Gly Val Arg Ser Tyr Gly Pro Arg His Arg Arg Leu His Arg Tyr Asp
245 250 255
Val Phe Cys Phe Ala Thr Ala Leu Lys Gly Arg Val Tyr Tyr Leu Glu
260 265 270
His Pro Glu Lys Leu Thr Leu Thr Glu Ala Arg Glu Ala Cys Gln Glu
275 280 285
Asp Asp Ala Thr Ile Ala Lys Val Gly Gln Leu Phe Ala Ala Trp Lys
290 295 300
Phe His Gly Leu Asp Arg Cys Asp Ala Gly Trp Leu Ala Asp Gly Ser
305 310 315 320
Val Arg Tyr Pro Val Val His Pro His Pro Asn Cys Gly Pro Pro Glu
325 330 335
Pro Gly Val Arg Ser Phe Gly Phe Pro Asp Pro Gln Ser Arg Leu Tyr
340 345 350
Gly Val Tyr Cys Tyr Arg Gln His
355 360

<210> 214

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 214

tgcttcgcta ctgccctc

18

<210> 215

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 215
ttcccttggtg ggttgag 18

<210> 216
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 216
agggtggaa gccagttc 18

<210> 217
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 217
agccagtgg gaaatgag 18

<210> 218
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 218
tgtccaaagt acacacacct gagg 24

<210> 219
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 219
gatgccacga tcgccaaggt gggacagctc tttgccgcct ggaag 45

<210> 220
<211> 1503
<212> DNA
<213> Homo sapiens

<400> 220
ggagagcggg gccaagctgg ataacagggg accgatgatg tggcgaccat cagttctgct 60
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cggaacttc cagtacgacc atgaggcttt cctgggacgg gaagtggcca aggaattcga 240
ccaactcacc ccagaggaaa gccaggcccc tctggggcgg atcgtggacc gcatggaccg 300

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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cgcggggggac ggcgacggct ggggtgtcgt ggccgagctt cgcgcgtgga tcgcgcacac 360
gcagcagcgcg cacatacggg actcgggtgag cgccggcctgg gacacgtacg acacggaccg 420
cgacgggctgt gtgggttggg aggagctgag caacgccacc tatggccact acgcgcccgg 480
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gtactcagcc gagcctgggg aggaggagcc ggcgtgggtg cagacggaga ggcagcagtt 780
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tgcttgccct ggcctgggac acctcctctc tgccaggagg caataaaagc cagcgccggg 1440
accttgaanaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaa

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<210> 221
 <211> 328
 <212> PRT
 <213> Homo sapiens

<400> 221
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 Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala Gly Pro His Gly Gln Gly
 20 25 30
 Arg Val His Gln Ala Ala Pro Leu Ser Asp Ala Pro His Asp Asp Ala
 35 40 45
 His Gly Asn Phe Gln Tyr Asp His Glu Ala Phe Leu Gly Arg Glu Val
 50 55 60
 Ala Lys Glu Phe Asp Gln Leu Thr Pro Glu Glu Ser Gln Ala Arg Leu
 65 70 75 80
 Gly Arg Ile Val Asp Arg Met Asp Arg Ala Gly Asp Gly Asp Gly Trp
 85 90 95
 Val Ser Leu Ala Glu Leu Arg Ala Trp Ile Ala His Thr Gln Gln Arg
 100 105 110
 His Ile Arg Asp Ser Val Ser Ala Ala Trp Asp Thr Tyr Asp Thr Asp
 115 120 125
 Arg Asp Gly Arg Val Gly Trp Glu Glu Leu Arg Asn Ala Thr Tyr Gly
 130 135 140
 His Tyr Ala Pro Gly Glu Glu Phe His Asp Val Glu Asp Ala Glu Thr
 145 150 155 160
 Tyr Lys Lys Met Leu Ala Arg Asp Glu Arg Arg Phe Arg Val Ala Asp
 165 170 175
 Gln Asp Gly Asp Ser Met Ala Thr Arg Glu Glu Leu Thr Ala Phe Leu
 180 185 190

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

His Pro Glu Glu Phe Pro His Met Arg Asp Ile Val Ile Ala Glu Thr
195 200 205
Leu Glu Asp Leu Asp Arg Asn Lys Asp Gly Tyr Val Gln Val Glu Glu
210 215 220
Tyr Ile Ala Asp Leu Tyr Ser Ala Glu Pro Gly Glu Glu Glu Pro Ala
225 230 235 240
Trp Val Gln Thr Glu Arg Gln Gln Phe Arg Asp Phe Arg Asp Leu Asn
245 250 255
Lys Asp Gly His Leu Asp Gly Ser Glu Val Gly His Trp Val Leu Pro
260 265 270
Pro Ala Gln Asp Gln Pro Leu Val Glu Ala Asn His Leu Leu His Glu
275 280 285
Ser Asp Thr Asp Lys Asp Gly Arg Leu Ser Lys Ala Glu Ile Leu Gly
290 295 300
Asn Trp Asn Met Phe Val Gly Ser Gln Ala Thr Asn Tyr Gly Glu Asp
305 310 315 320
Leu Thr Arg His His Asp Glu Leu
325

<210> 222

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 222

cgcaggccct catggccagg

20

<210> 223

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 223

gaaatcctgg gtaattgg

18

<210> 224

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 224

gtgcgcggtg ctcacagctc atc

23

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 225

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide probe

<400> 225

ccccctgag cgacgctccc ccatgatgac gccacggga actt

44

<210> 226

<211> 2403

<212> DNA

<213> Homo sapiens

<400> 226

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ggggccttgc cttccgcact cgggcgcagc cgggtggatc tcgagcaggt gcggagcccc 60
gggcggcggg cgcggtgctg agggatccct gacgcctctg tccctgtttc tttgtcgctc 120
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<210> 227

<211> 550

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<212> PRT

<213> Homo sapiens

<400> 227

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Thr Cys Phe Thr Arg Gly Leu Asp Ile Arg Lys Glu Lys Ala Asp Val
      35      40      45
Leu Cys Pro Gly Gly Cys Pro Leu Glu Glu Phe Ser Val Tyr Gly Asn
      50      55      60
Ile Val Tyr Ala Ser Val Ser Ser Ile Cys Gly Ala Ala Val His Arg
      65      70      75      80
Gly Val Ile Ser Asn Ser Gly Gly Pro Val Arg Val Tyr Ser Leu Pro
      85      90      95
Gly Arg Glu Asn Tyr Ser Ser Val Asp Ala Asn Gly Ile Gln Ser Gln
      100     105     110
Met Leu Ser Arg Trp Ser Ala Ser Phe Thr Val Thr Lys Gly Lys Ser
      115     120     125
Ser Thr Gln Glu Ala Thr Gly Gln Ala Val Ser Thr Ala His Pro Pro
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Thr Gly Lys Arg Leu Lys Lys Thr Pro Glu Lys Lys Thr Gly Asn Lys
      145     150     155     160
Asp Cys Lys Ala Asp Ile Ala Phe Leu Ile Asp Gly Ser Phe Asn Ile
      165     170     175
Gly Gln Arg Arg Phe Asn Leu Gln Lys Asn Phe Val Gly Lys Val Ala
      180     185     190
Leu Met Leu Gly Ile Gly Thr Glu Gly Pro His Val Gly Leu Val Gln
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      225     230     235     240
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Thr Val Asp Ala Gly Val Arg Lys Gly Ile Pro Lys Val Val Val Val
      260     265     270
Phe Ile Asp Gly Trp Pro Ser Asp Asp Ile Glu Glu Ala Gly Ile Val
      275     280     285
Ala Arg Glu Phe Gly Val Asn Val Phe Ile Val Ser Val Ala Lys Pro
      290     295     300
Ile Pro Glu Glu Leu Gly Met Val Gln Asp Val Thr Phe Val Asp Lys
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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340 345 350
His Glu Gln Met Met Cys Ser Lys Thr Cys Tyr Asn Ser Val Asn Ile
355 360 365
Ala Phe Leu Ile Asp Gly Ser Ser Ser Val Gly Asp Ser Asn Phe Arg
370 375 380
Leu Met Leu Glu Phe Val Ser Asn Ile Ala Lys Thr Phe Glu Ile Ser
385 390 395 400
Asp Ile Gly Ala Lys Ile Ala Ala Val Gln Phe Thr Tyr Asp Gln Arg
405 410 415
Thr Glu Phe Ser Phe Thr Asp Tyr Ser Thr Lys Glu Asn Val Leu Ala
420 425 430
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435 440 445
Ala Ile Ser Phe Thr Val Arg Asn Val Phe Gly Pro Ile Arg Glu Ser
450 455 460
Pro Asn Lys Asn Phe Leu Val Ile Val Thr Asp Gly Gln Ser Tyr Asp
465 470 475 480
Asp Val Gln Gly Pro Ala Ala Ala Ala His Asp Ala Gly Ile Thr Ile
485 490 495
Phe Ser Val Gly Val Ala Trp Ala Pro Leu Asp Asp Leu Lys Asp Met
500 505 510
Ala Ser Lys Pro Lys Glu Ser His Ala Phe Phe Thr Arg Glu Phe Thr
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Phe Leu Glu Ser Gln Gln
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<210> 228

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide probe

<400> 228

tggtctcgca caccgatc

18

<210> 229

<211> 18

<212> DNA

<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 229
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<210> 230
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 230
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<210> 231
 <211> 18
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 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 231
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<210> 232
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<220>
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 oligonucleotide probe

<400> 232
 ttctcaaga gggcagcc 18

<210> 233
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

<400> 233
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<210> 234
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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45

<210> 235
<211> 2586
<212> DNA
<213> Homo sapiens

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aaaaaa 2586

<210> 236
<211> 350
<212> PRT
<213> Homo sapiens

<400> 236
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Val Pro Thr Ala₂₀ Pro Ala Pro Ala₂₅ Thr Ala Thr Ser Ala₃₀ Pro Val
Lys Pro Gly₃₅ Pro Ala Leu Ser Tyr₄₀ Pro Gln Glu Glu Ala₄₅ Thr Leu Asn
Glu Met₅₀ Phe Arg Glu Val Glu₅₅ Glu Leu Met Glu Asp₆₀ Thr Gln His Lys
Leu Arg Ser Ala Val Glu₇₀ Glu Met Glu Ala Glu₇₅ Glu Ala Ala Ala Lys₈₀
Ala Ser Ser Glu Val₈₅ Asn Leu Ala Asn Leu₉₀ Pro Pro Ser Tyr His₉₅ Asn
Glu Thr Asn Thr₁₀₀ Asp Thr Lys Val Gly₁₀₅ Asn Asn Thr Ile His₁₁₀ Val His
Arg Glu Ile₁₁₅ His Lys Ile Thr Asn₁₂₀ Asn Gln Thr Gly Gln₁₂₅ Met Val Phe
Ser Glu₁₃₀ Thr Val Ile Thr Ser₁₃₅ Val Gly Asp Glu Glu₁₄₀ Gly Arg Arg Ser
His Glu Cys Ile Ile Asp₁₅₀ Glu Asp Cys Gly₁₅₅ Ser Met Tyr Cys Gln₁₆₀
Phe Ala Ser Phe Glu₁₆₅ Tyr Thr Cys Gln Pro₁₇₀ Cys Arg Gly Gln Arg₁₇₅ Met
Leu Cys Thr Arg₁₈₀ Asp Ser Glu Cys Cys₁₈₅ Gly Asp Gln Leu Cys₁₉₀ Val Trp
Gly His Cys₁₉₅ Thr Lys Met Ala Thr₂₀₀ Arg Gly Ser Asn Gly₂₀₅ Thr Ile Cys
Asp Asn Gln Arg Asp Cys Gln₂₁₅ Pro Gly Leu Cys Cys₂₂₀ Ala Phe Gln Arg
Gly₂₂₅ Leu Leu Phe Pro Val₂₃₀ Cys Thr Pro Leu Pro₂₃₅ Val Glu Gly Glu Leu₂₄₀
Cys His Asp Pro Ala₂₄₅ Ser Arg Leu Leu Asp₂₅₀ Leu Ile Thr Trp Glu₂₅₅ Leu
Glu Pro Asp Gly₂₆₀ Ala Leu Asp Arg Cys₂₆₅ Pro Cys Ala Ser Gly₂₇₀ Leu Leu
Cys Gln Pro₂₇₅ His Ser His Ser Leu₂₈₀ Val Tyr Val Cys Lys₂₈₅ Pro Thr Phe
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Pro Asp Glu Tyr Glu Val₃₁₀ Gly Ser Phe Met Glu₃₁₅ Glu Val Arg Gln Glu₃₂₀
Leu Glu Asp Leu Glu₃₂₅ Arg Ser Leu Thr Glu₃₃₀ Glu Met Ala Leu Gly₃₃₅ Glu
Pro Ala Ala Ala₃₄₀ Ala Ala Ala Leu Leu₃₄₅ Gly Gly Glu Glu Ile₃₅₀

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 <211> 17
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic oligonucleotide probe

 <400> 237
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 <210> 238
 <211> 49
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic Oligonucleotide Probe

 <400> 238
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 <210> 239
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic Oligonucleotide Probe

 <400> 239
 gcagagcggg gatgcagcgg cttg 24

 <210> 240
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic Oligonucleotide Probe

 <400> 240
 ttggcagctt catggagg 18

 <210> 241
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic Oligonucleotide Probe

 <400> 241
 cctgggcaaa aatgcaac 18

 <210> 242
 <211> 24
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 <213> Artificial Sequence

 <220>
 <223> synthetic Oligonucleotide Probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 242
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<210> 243
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 243
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<210> 244
<211> 3679
<212> DNA
<213> Homo Sapien

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cacacataca ctttctcttc cttcactgaa gactcacagt cactcactct 200
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 catttgggag agggatgccc aggaacgcct catctcagca gcctgggctc 3550
 ggcattccga agctgacttt ctataggcaa tttgtacct ttgtggagaa 3600
 atgtgtcacc tcccccaacc cgattcactc ttttctcctg ttttgtaaaa 3650
 aataaaaata aataataaca ataaaaaaa 3679

<210> 245

<211> 713

<212> PRT

<213> Homo Sapien

<400> 245

Met Arg Leu Leu Val Ala Pro Leu Leu Leu Ala Trp Val Ala Gly
 1 5 10 15

Ala Thr Ala Thr Val Pro Val Val Pro Trp His Val Pro Cys Pro
 20 25 30

Pro Gln Cys Ala Cys Gln Ile Arg Pro Trp Tyr Thr Pro Arg Ser
 35 40 45

Ser Tyr Arg Glu Ala Thr Thr Val Asp Cys Asn Asp Leu Phe Leu
 50 55 60

Thr Ala Val Pro Pro Ala Leu Pro Ala Gly Thr Gln Thr Leu Leu
 65 70 75

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu	Gln	Ser	Asn	Ser	Ile	Val	Arg	Val	Asp	Gln	Ser	Glu	Leu	Gly	80	85	90
Tyr	Leu	Ala	Asn	Leu	Thr	Glu	Leu	Asp	Leu	Ser	Gln	Asn	Ser	Phe	95	100	105
Ser	Asp	Ala	Arg	Asp	Cys	Asp	Phe	His	Ala	Leu	Pro	Gln	Leu	Leu	110	115	120
Ser	Leu	His	Leu	Glu	Glu	Asn	Gln	Leu	Thr	Arg	Leu	Glu	Asp	His	125	130	135
Ser	Phe	Ala	Gly	Leu	Ala	Ser	Leu	Gln	Glu	Leu	Tyr	Leu	Asn	His	140	145	150
Asn	Gln	Leu	Tyr	Arg	Ile	Ala	Pro	Arg	Ala	Phe	Ser	Gly	Leu	Ser	155	160	165
Asn	Leu	Leu	Arg	Leu	His	Leu	Asn	Ser	Asn	Leu	Leu	Arg	Ala	Ile	170	175	180
Asp	Ser	Arg	Trp	Phe	Glu	Met	Leu	Pro	Asn	Leu	Glu	Ile	Leu	Met	185	190	195
Ile	Gly	Gly	Asn	Lys	Val	Asp	Ala	Ile	Leu	Asp	Met	Asn	Phe	Arg	200	205	210
Pro	Leu	Ala	Asn	Leu	Arg	Ser	Leu	Val	Leu	Ala	Gly	Met	Asn	Leu	215	220	225
Arg	Glu	Ile	Ser	Asp	Tyr	Ala	Leu	Glu	Gly	Leu	Gln	Ser	Leu	Glu	230	235	240
Ser	Leu	Ser	Phe	Tyr	Asp	Asn	Gln	Leu	Ala	Arg	Val	Pro	Arg	Arg	245	250	255
Ala	Leu	Glu	Gln	Val	Pro	Gly	Leu	Lys	Phe	Leu	Asp	Leu	Asn	Lys	260	265	270
Asn	Pro	Leu	Gln	Arg	Val	Gly	Pro	Gly	Asp	Phe	Ala	Asn	Met	Leu	275	280	285
His	Leu	Lys	Glu	Leu	Gly	Leu	Asn	Asn	Met	Glu	Glu	Leu	Val	Ser	290	295	300
Ile	Asp	Lys	Phe	Ala	Leu	Val	Asn	Leu	Pro	Glu	Leu	Thr	Lys	Leu	305	310	315
Asp	Ile	Thr	Asn	Asn	Pro	Arg	Leu	Ser	Phe	Ile	His	Pro	Arg	Ala	320	325	330
Phe	His	His	Leu	Pro	Gln	Met	Glu	Thr	Leu	Met	Leu	Asn	Asn	Asn	335	340	345
Ala	Leu	Ser	Ala	Leu	His	Gln	Gln	Thr	Val	Glu	Ser	Leu	Pro	Asn	350	355	360
Leu	Gln	Glu	Val	Gly	Leu	His	Gly	Asn	Pro	Ile	Arg	Cys	Asp	Cys	365	370	375
Val	Ile	Arg	Trp	Ala	Asn	Ala	Thr	Gly	Thr	Arg	Val	Arg	Phe	Ile	380	385	390

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Glu	Pro	Gln	Ser	Thr	Leu	Cys	Ala	Glu	Pro	Pro	Asp	Leu	Gln	Arg	395	400	405
Leu	Pro	Val	Arg	Glu	Val	Pro	Phe	Arg	Glu	Met	Thr	Asp	His	Cys	410	415	420
Leu	Pro	Leu	Ile	Ser	Pro	Arg	Ser	Phe	Pro	Pro	Ser	Leu	Gln	Val	425	430	435
Ala	Ser	Gly	Glu	Ser	Met	Val	Leu	His	Cys	Arg	Ala	Leu	Ala	Glu	440	445	450
Pro	Glu	Pro	Glu	Ile	Tyr	Trp	Val	Thr	Pro	Ala	Gly	Leu	Arg	Leu	455	460	465
Thr	Pro	Ala	His	Ala	Gly	Arg	Arg	Tyr	Arg	Val	Tyr	Pro	Glu	Gly	470	475	480
Thr	Leu	Glu	Leu	Arg	Arg	Val	Thr	Ala	Glu	Glu	Ala	Gly	Leu	Tyr	485	490	495
Thr	Cys	Val	Ala	Gln	Asn	Leu	Val	Gly	Ala	Asp	Thr	Lys	Thr	Val	500	505	510
Ser	Val	Val	Val	Gly	Arg	Ala	Leu	Leu	Gln	Pro	Gly	Arg	Asp	Glu	515	520	525
Gly	Gln	Gly	Leu	Glu	Leu	Arg	Val	Gln	Glu	Thr	His	Pro	Tyr	His	530	535	540
Ile	Leu	Leu	Ser	Trp	Val	Thr	Pro	Pro	Asn	Thr	Val	Ser	Thr	Asn	545	550	555
Leu	Thr	Trp	Ser	Ser	Ala	Ser	Ser	Leu	Arg	Gly	Gln	Gly	Ala	Thr	560	565	570
Ala	Leu	Ala	Arg	Leu	Pro	Arg	Gly	Thr	His	Ser	Tyr	Asn	Ile	Thr	575	580	585
Arg	Leu	Leu	Gln	Ala	Thr	Glu	Tyr	Trp	Ala	Cys	Leu	Gln	Val	Ala	590	595	600
Phe	Ala	Asp	Ala	His	Thr	Gln	Leu	Ala	Cys	Val	Trp	Ala	Arg	Thr	605	610	615
Lys	Glu	Ala	Thr	Ser	Cys	His	Arg	Ala	Leu	Gly	Asp	Arg	Pro	Gly	620	625	630
Leu	Ile	Ala	Ile	Leu	Ala	Leu	Ala	Val	Leu	Leu	Leu	Ala	Ala	Gly	635	640	645
Leu	Ala	Ala	His	Leu	Gly	Thr	Gly	Gln	Pro	Arg	Lys	Gly	Val	Gly	650	655	660
Gly	Arg	Arg	Pro	Leu	Pro	Pro	Ala	Trp	Ala	Phe	Trp	Gly	Trp	Ser	665	670	675
Ala	Pro	Ser	Val	Arg	Val	Val	Ser	Ala	Pro	Leu	Val	Leu	Pro	Trp	680	685	690
Asn	Pro	Gly	Arg	Lys	Leu	Pro	Arg	Ser	Ser	Glu	Gly	Glu	Thr	Leu	695	700	705

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Pro Pro Leu Ser Gln Asn Ser
710

<210> 246

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 246

aacaaggtaa gatgcatcc tg 22

<210> 247

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 247

aaacttgctg atggagacca gctc 24

<210> 248

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 248

aggggctgca aagcctggag agcctctcct tctatgacaa ccagc 45

<210> 249

<211> 3401

<212> DNA

<213> Homo Sapien

<400> 249

gcaagccaag gcgctgtttg agaaggtgaa gaagttccgg acccatgtgg 50

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catcaagttc gacgtggact gcaccgtgga cattgagagc ctgacgggct 200

accgcaccta ccgctgtgcc cccccctgg ccacactctt caagatcctg 250

gcgtccttct acatcagcct agtcatcttc tacggcctca tctgcatgta 300

cacactgtgg tggatgctac ggcgctccct caagaagtac tcgtttgagt 350

cgatccgtga ggagagcagc tacagcgaca tccccgacgt caagaacgac 400

ttcgccttca tgctgcacct cattgaccaa tacgacccgc tctactccaa 450

gcgcttcgcc gtcttcctgt cggaggtgag tgagaacaag ctgcggcagc 500

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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ccctgacact gtgtttgacc tggaggagct ggaggtcctc aagctggagc 650
tgatccccga cgtgaccatc ccgcccagca ttgcccagct cacgggcctc 700
aaggagctgt ggctctacca cacagcggcc aagattgaag cgcctgcgct 750
ggccttcctg cgcgagaacc tgcgggcgct gcacatcaag ttcaccgaca 800
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cgggctgcgg gagctcaaac gcctcaaggt gctgcggctc aagagcaacc 950
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ctgtccatca acaatgaggg caccaagctc atcgtcctca acagcctcaa 1050
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aacaagatcg agaagatccc caccagctc ttctactgcc gcaagctgcg 1350
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gcttgtgagt caggccagag cgagaggaca gtatctgtgg ggctggcccc 1900
ttttctccct ctgagactca cgtccccag ggcaagtgtc tgtggaggag 1950
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

agataactta tacattccca agaaagtcca gccagatgg aaggtgttca 2150
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 ggcatttaac acccacctgg acttcagcag agtgggtccg ggcgaaccag 2250
 ccatgggacg gtcacccagc agtgccgggc tgggctctgc ggtgcggtcc 2300
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 tcagtttttg tggcagtttt agttttttgt tttttttttt tttaatcaaa 2400
 aaacaatttt ttttaaaaaa aagctttgaa aatggatggg ttgggtatta 2450
 aaaagaaaaa aaaaacttaa aaaaaaaaag aactaacgg ccagtgaagt 2500
 ggagtctcag ggcagggtgg cagtttcctt tgagcaaagc agccagacgt 2550
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a 3401

<210> 250

<211> 546

<212> PRT

<213> Homo Sapien

<400> 250

Met Arg Gln Thr Ile Ile Lys Val Ile Lys Phe Ile Leu Ile Ile

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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Cys Tyr Thr Val Tyr	Tyr Val His Asn Ile	Lys Phe Asp Val Asp	
20	25	30	
Cys Thr Val Asp Ile	Glu Ser Leu Thr Gly	Tyr Arg Thr Tyr Arg	
35	40	45	
Cys Ala His Pro Leu	Ala Thr Leu Phe Lys	Ile Leu Ala Ser Phe	
50	55	60	
Tyr Ile Ser Leu Val	Ile Phe Tyr Gly Leu	Ile Cys Met Tyr Thr	
65	70	75	
Leu Trp Trp Met Leu	Arg Arg Ser Leu Lys	Lys Tyr Ser Phe Glu	
80	85	90	
Ser Ile Arg Glu Glu	Ser Ser Tyr Ser Asp	Ile Pro Asp Val Lys	
95	100	105	
Asn Asp Phe Ala Phe	Met Leu His Leu Ile	Asp Gln Tyr Asp Pro	
110	115	120	
Leu Tyr Ser Lys Arg	Phe Ala Val Phe Leu	Ser Glu Val Ser Glu	
125	130	135	
Asn Lys Leu Arg Gln	Leu Asn Leu Asn Asn	Glu Trp Thr Leu Asp	
140	145	150	
Lys Leu Arg Gln Arg	Leu Thr Lys Asn Ala	Gln Asp Lys Leu Glu	
155	160	165	
Leu His Leu Phe Met	Leu Ser Gly Ile Pro	Asp Thr Val Phe Asp	
170	175	180	
Leu Val Glu Leu Glu	Val Leu Lys Leu Glu	Leu Ile Pro Asp Val	
185	190	195	
Thr Ile Pro Pro Ser	Ile Ala Gln Leu Thr	Gly Leu Lys Glu Leu	
200	205	210	
Trp Leu Tyr His Thr	Ala Ala Lys Ile Glu	Ala Pro Ala Leu Ala	
215	220	225	
Phe Leu Arg Glu Asn	Leu Arg Ala Leu His	Ile Lys Phe Thr Asp	
230	235	240	
Ile Lys Glu Ile Pro	Leu Trp Ile Tyr Ser	Leu Lys Thr Leu Glu	
245	250	255	
Glu Leu His Leu Thr	Gly Asn Leu Ser Ala	Glu Asn Asn Arg Tyr	
260	265	270	
Ile Val Ile Asp Gly	Leu Arg Glu Leu Lys	Arg Leu Lys Val Leu	
275	280	285	
Arg Leu Lys Ser Asn	Leu Ser Lys Leu Pro	Gln Val Val Thr Asp	
290	295	300	
Val Gly Val His Leu	Gln Lys Leu Ser Ile	Asn Asn Glu Gly Thr	
305	310	315	

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Lys Leu Ile Val Leu Asn Ser Leu Lys Lys Met Ala Asn Leu Thr
320 325 330

Glu Leu Glu Leu Ile Arg Cys Asp Leu Glu Arg Ile Pro His Ser
335 340 345

Ile Phe Ser Leu His Asn Leu Gln Glu Ile Asp Leu Lys Asp Asn
350 355 360

Asn Leu Lys Thr Ile Glu Glu Ile Ile Ser Phe Gln His Leu His
365 370 375

Arg Leu Thr Cys Leu Lys Leu Trp Tyr Asn His Ile Ala Tyr Ile
380 385 390

Pro Ile Gln Ile Gly Asn Leu Thr Asn Leu Glu Arg Leu Tyr Leu
395 400 405

Asn Arg Asn Lys Ile Glu Lys Ile Pro Thr Gln Leu Phe Tyr Cys
410 415 420

Arg Lys Leu Arg Tyr Leu Asp Leu Ser His Asn Asn Leu Thr Phe
425 430 435

Leu Pro Ala Asp Ile Gly Leu Leu Gln Asn Leu Gln Asn Leu Ala
440 445 450

Ile Thr Ala Asn Arg Ile Glu Thr Leu Pro Pro Glu Leu Phe Gln
455 460 465

Cys Arg Lys Leu Arg Ala Leu His Leu Gly Asn Asn Val Leu Gln
470 475 480

Ser Leu Pro Ser Arg Val Gly Glu Leu Thr Asn Leu Thr Gln Ile
485 490 495

Glu Leu Arg Gly Asn Arg Leu Glu Cys Leu Pro Val Glu Leu Gly
500 505 510

Glu Cys Pro Leu Leu Lys Arg Ser Gly Leu Val Val Glu Glu Asp
515 520 525

Leu Phe Asn Thr Leu Pro Pro Glu Val Lys Glu Arg Leu Trp Arg
530 535 540

Ala Asp Lys Glu Gln Ala
545

<210> 251

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 251

caacaatgag ggcaccaagc 20

<210> 252

<211> 24

<212> DNA

<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>

<223> Synthetic Oligonucleotide Probe

<400> 252

gatggctagg ttctggaggt tctg 24

<210> 253

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 253

caacctgcag gagattgacc tcaaggacaa caacctcaag accatcg 47

<210> 254

<211> 1650

<212> DNA

<213> Homo Sapien

<400> 254

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 gcgctctccc gtcccgcggt gggtgctgct gctgccgctg ctgctgggcc 100
 tgaacgcagg agctgtcatt gactggccca cagaggaggg caaggaagta 150
 tgggattatg tgacgggtccg caaggatgcc tacatgttct ggtggctcta 200
 ttatgccacc aactcctgca agaacttctc agaactgccc ctggtcatgt 250
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 gaaattgggc cccttgacag tgatctcaaa ccacggaaaa ccacctggct 350
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 gttatgtgaa tggtagtggt gcctatgcc aaggacctggc tatggtggct 450
 tcagacatga tggttctcct gaagaccttc ttcagttgcc acaaagaatt 500
 ccagacagtt ccattctaca ttttctcaga gtcctatgga ggaaaaatgg 550
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 aagtgcact ttgcgggggt tgccttgggt gattcctgga tctcccctgt 650
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 agatgcctta agccagctca tgaatggccc catcagaaaag aagctcaaaa 1000

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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gctggaggca gggatcaacg tgacggtgta taatggacag ctggatctca 1150
tcgtagatac catgggctcag gaggcctggg tgcggaaact gaagtggcca 1200
gaactgccta aattcagtca gctgaagtgg aaggccctgt acagtgaccc 1250
taaatctttg gaaacatctg cttttgtcaa gtcctacaag aaccttgctt 1300
tctactggat tctgaaagct ggtcatatgg ttccttctga ccaaggggac 1350
atggctctga agatgatgag actggtgact cagcaagaat aggatggatg 1400
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taaaaaattg atttgttttg atcaaaataa aggatgataa tagatattaa 1650

<210> 255

<211> 452

<212> PRT

<213> Homo Sapien

<400> 255

Met	Glu	Leu	Ala	Leu	Arg	Arg	Ser	Pro	Val	Pro	Arg	Trp	Leu	Leu
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Leu	Leu	Pro	Leu	Leu	Leu	Gly	Leu	Asn	Ala	Gly	Ala	Val	Ile	Asp
			20						25					30
Trp	Pro	Thr	Glu	Glu	Gly	Lys	Glu	Val	Trp	Asp	Tyr	Val	Thr	Val
			35						40					45
Arg	Lys	Asp	Ala	Tyr	Met	Phe	Trp	Trp	Leu	Tyr	Tyr	Ala	Thr	Asn
			50						55					60
Ser	Cys	Lys	Asn	Phe	Ser	Glu	Leu	Pro	Leu	Val	Met	Trp	Leu	Gln
			65						70					75
Gly	Gly	Pro	Gly	Gly	Ser	Ser	Thr	Gly	Phe	Gly	Asn	Phe	Glu	Glu
			80						85					90
Ile	Gly	Pro	Leu	Asp	Ser	Asp	Leu	Lys	Pro	Arg	Lys	Thr	Thr	Trp
			95						100					105
Leu	Gln	Ala	Ala	Ser	Leu	Leu	Phe	Val	Asp	Asn	Pro	Val	Gly	Thr
			110						115					120
Gly	Phe	Ser	Tyr	Val	Asn	Gly	Ser	Gly	Ala	Tyr	Ala	Lys	Asp	Leu
			125						130					135
Ala	Met	Val	Ala	Ser	Asp	Met	Met	Val	Leu	Leu	Lys	Thr	Phe	Phe
			140						145					150

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser
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Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly Leu Glu Leu
170                               175                               180

Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe Ala Gly
185                               190                               195

Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val Leu
200                               205                               210

Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
215                               220                               225

Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala
230                               235                               240

Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys
245                               250                               255

Ala Glu Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr
260                               265                               270

Asn Ile Leu Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser
275                               280                               285

Leu Glu Phe Thr Gln Ser His Leu Val Cys Leu Cys Gln Arg His
290                               295                               300

Val Arg His Leu Gln Arg Asp Ala Leu Ser Gln Leu Met Asn Gly
305                               310                               315

Pro Ile Arg Lys Lys Leu Lys Ile Ile Pro Glu Asp Gln Ser Trp
320                               325                               330

Gly Gly Gln Ala Thr Asn Val Phe Val Asn Met Glu Glu Asp Phe
335                               340                               345

Met Lys Pro Val Ile Ser Ile Val Asp Glu Leu Leu Glu Ala Gly
350                               355                               360

Ile Asn Val Thr Val Tyr Asn Gly Gln Leu Asp Leu Ile Val Asp
365                               370                               375

Thr Met Gly Gln Glu Ala Trp Val Arg Lys Leu Lys Trp Pro Glu
380                               385                               390

Leu Pro Lys Phe Ser Gln Leu Lys Trp Lys Ala Leu Tyr Ser Asp
395                               400                               405

Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser Tyr Lys Asn
410                               415                               420

Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val Pro Ser
425                               430                               435

Asp Gln Gly Asp Met Ala Leu Lys Met Met Arg Leu Val Thr Gln
440                               445                               450

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Gln Glu

<210> 256

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 1100

<212> DNA

<213> Homo Sapien

<400> 256

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ccgttatcag gaccatgcgg ccgacgggtc atcacgtcgc gcatcgtggg 150
tggagaggac gccgaactcg ggcgttgccc gtggcagggg agcctgcgcc 200
tgtgggattc ccacgtatgc ggagtgaacc tgctcagcca ccgctgggca 250
ctcacggcgg cgcactgctt tgaaacctat agtgacctta gtgatccctc 300
cgggtggatg gtccagtttg gccagctgac ttccatgcca tccttctgga 350
gcctgcaggc ctactacacc cgttacttcg tatcgaatat ctatctgagc 400
cctcgtacc tggggaattc accctatgac attgccttgg tgaagctgtc 450
tgcacctgtc acctacacta aacacatcca gcccatctgt ctccaggcct 500
ccacatttga gtttgagaac cggacagact gctgggtgac tggctggggg 550
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tcaggtcgcc atcataaaca actctatgtg caaccacctc ttcctcaagt 650
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<210> 257

<211> 314

<212> PRT

<213> Homo Sapien

<400> 257

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Met Gly Ala Arg Gly Ala Leu Leu Leu Ala Arg
 1           5           10          15
Ala Gly Leu Arg Lys Pro Glu Ser Gln Glu Ala Ala Pro Leu Ser
                20                25                30
Gly Pro Cys Gly Arg Arg Val Ile Thr Ser Arg Ile Val Gly Gly

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Glu	Asp	Ala	Glu	Leu	Gly	Arg	Trp	Pro	Trp	Gln	Gly	Ser	Leu	Arg	35	40	45
				50					55					60			
Leu	Trp	Asp	Ser	His	Val	Cys	Gly	Val	Ser	Leu	Leu	Ser	His	Arg	65	70	75
Trp	Ala	Leu	Thr	Ala	Ala	His	Cys	Phe	Glu	Thr	Tyr	Ser	Asp	Leu	80	85	90
Ser	Asp	Pro	Ser	Gly	Trp	Met	Val	Gln	Phe	Gly	Gln	Leu	Thr	Ser	95	100	105
Met	Pro	Ser	Phe	Trp	Ser	Leu	Gln	Ala	Tyr	Tyr	Thr	Arg	Tyr	Phe	110	115	120
Val	Ser	Asn	Ile	Tyr	Leu	Ser	Pro	Arg	Tyr	Leu	Gly	Asn	Ser	Pro	125	130	135
Tyr	Asp	Ile	Ala	Leu	Val	Lys	Leu	Ser	Ala	Pro	Val	Thr	Tyr	Thr	140	145	150
Lys	His	Ile	Gln	Pro	Ile	Cys	Leu	Gln	Ala	Ser	Thr	Phe	Glu	Phe	155	160	165
Glu	Asn	Arg	Thr	Asp	Cys	Trp	Val	Thr	Gly	Trp	Gly	Tyr	Ile	Lys	170	175	180
Glu	Asp	Glu	Ala	Leu	Pro	Ser	Pro	His	Thr	Leu	Gln	Glu	Val	Gln	185	190	195
Val	Ala	Ile	Ile	Asn	Asn	Ser	Met	Cys	Asn	His	Leu	Phe	Leu	Lys	200	205	210
Tyr	Ser	Phe	Arg	Lys	Asp	Ile	Phe	Gly	Asp	Met	Val	Cys	Ala	Gly	215	220	225
Asn	Ala	Gln	Gly	Gly	Lys	Asp	Ala	Cys	Phe	Gly	Asp	Ser	Gly	Gly	230	235	240
Pro	Leu	Ala	Cys	Asn	Lys	Asn	Gly	Leu	Trp	Tyr	Gln	Ile	Gly	Val	245	250	255
Val	Ser	Trp	Gly	Val	Gly	Cys	Gly	Arg	Pro	Asn	Arg	Pro	Gly	Val	260	265	270
Tyr	Thr	Asn	Ile	Ser	His	His	Phe	Glu	Trp	Ile	Gln	Lys	Leu	Met	275	280	285
Ala	Gln	Ser	Gly	Met	Ser	Gln	Pro	Asp	Pro	Ser	Trp	Pro	Leu	Leu	290	295	300
Phe	Phe	Pro	Leu	Leu	Trp	Ala	Leu	Pro	Leu	Leu	Gly	Pro	Val		305	310	

<210> 258
 <211> 2427
 <212> DNA
 <213> Homo Sapien

<400> 258
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 Page 133

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 cggagcccga ccagcggagg acgctgcccc caggctgggt gtccctgggc 150
 cgtgcggacc ctgaggaaga gctgagtctc acctttgccc tgagacagca 200
 gaatgtggaa agactctcgg agctggtgca ggctgtgtcg gatcccagct 250
 ctctcaata cggaaaatac ctgaccctag agaattgtggc tgatctggtg 300
 aggccatccc cactgaccct ccacacgggt caaaaatggc tcttggcagc 350
 cggagcccag aagtgccatt ctgtgatcac acaggacttt ctgacttgct 400
 ggctgagcat ccgacaagca gagctgtgtc tccctggggc tgagtttcat 450
 cactatgtgg gaggacctac ggaaacccat gttgtaaggt ccccatcc 500
 ctaccagctt ccacaggcct tggccccca tgtggacttt gtggggggac 550
 tgcaccgttt tcccccaaca tcatccctga ggcaacgtcc tgagccgcag 600
 gtgacaggga ctgtaggcct gcatctgggg gtaacccct ctgtgatccg 650
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 acagccaagc ctgtgcccag ttcctggagc agtatttcca tgactcagac 750
 ctggctcagt tcattgcgct cttcgggtggc aactttgcac atcaggcatc 800
 agtagcccggt gtggttgagc aacagggccg gggccgggccc gggattgagg 850
 ccagtctaga tgtgcagtac ctgatgagt ctggtgccaa catctccacc 900
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 tgagctatgg agatgatgag gactccctca gcagcgccta catccagcgg 1050
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 cgccctcagggt gacagtgggg ccgggtgttg gtctgtctct ggaagacacc 1150
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 tgatggctac tgggtgggtca gcaacagagt gccattcca tgggtgtccg 1450
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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 ctgaagactc tactcaaccc ctgacccttt cctatcagga gagatggctt 1750
 gtccctgcc ctgaagctgg cagttcagtc ccttattctg ccctgttgga 1800
 agccctgctg aaccctcaac tattgactgc tgcagacagc ttatctccct 1850
 aaccctgaaa tgctgtgagc ttgacttgac tccaaccct accatgctcc 1900
 atcatactca ggtctcccta ctctgcctt agattcctca ataagatgct 1950
 gtaactagca ttttttgaat gcctctccct ccgcatctca tctttctctt 2000
 ttcaatcagg cttttccaaa gggttgtata cagactctgt gcactatttc 2050
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 tttactcttt cctaccctga catccagaaa caatggcctc cagtgcatac 2150
 ttctcaatct ttgctttatg gcctttccat catagttgcc cactccctct 2200
 ccttacttag cttccaggtc ttaacttctc tgactactct tgtcttcctc 2250
 tctcatcaat ttctgcttct tcatggaatg ctgaccttca ttgctccatt 2300
 tgtagatttt tgctcttctc agtttactca ttgtcccctg gaacaaatca 2350
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 aatgattgat acctcaaatg taaaaaa 2427

<210> 259
 <211> 556
 <212> PRT
 <213> Homo Sapien

<400> 259
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 20 25 30
 Leu Pro Pro Gly Trp Val Ser Leu Gly Arg Ala Asp Pro Glu Glu
 35 40 45
 Glu Leu Ser Leu Thr Phe Ala Leu Arg Gln Gln Asn Val Glu Arg
 50 55 60
 Leu Ser Glu Leu Val Gln Ala Val Ser Asp Pro Ser Ser Pro Gln
 65 70 75
 Tyr Gly Lys Tyr Leu Thr Leu Glu Asn Val Ala Asp Leu Val Arg
 80 85 90
 Pro Ser Pro Leu Thr Leu His Thr Val Gln Lys Trp Leu Leu Ala
 95 100 105
 Ala Gly Ala Gln Lys Cys His Ser Val Ile Thr Gln Asp Phe Leu
 110 115 120

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Thr Cys Trp Leu	Ser 125	Ile Arg Gln Ala	Glu 130	Leu Leu Leu Pro	Gly 135
Ala Glu Phe His	His 140	Tyr Val Gly Gly	Pro 145	Thr Glu Thr His	Val 150
Val Arg Ser Pro	His 155	Pro Tyr Gln Leu	Pro 160	Gln Ala Leu Ala	Pro 165
His Val Asp Phe	Val 170	Gly Gly Leu His	Arg 175	Phe Pro Pro Thr	Ser 180
Ser Leu Arg Gln	Arg 185	Pro Glu Pro Gln	Val 190	Thr Gly Thr Val	Gly 195
Leu His Leu Gly	Val 200	Thr Pro Ser Val	Ile 205	Arg Lys Arg Tyr	Asn 210
Leu Thr Ser Gln	Asp 215	Val Gly Ser Gly	Thr 220	Ser Asn Asn Ser	Gln 225
Ala Cys Ala Gln	Phe 230	Leu Glu Gln Tyr	Phe 235	His Asp Ser Asp	Leu 240
Ala Gln Phe Met	Arg 245	Leu Phe Gly Gly	Asn 250	Phe Ala His Gln	Ala 255
Ser Val Ala Arg	Val 260	Val Gly Gln Gln	Gly 265	Arg Gly Arg Ala	Gly 270
Ile Glu Ala Ser	Leu 275	Asp Val Gln Tyr	Leu 280	Met Ser Ala Gly	Ala 285
Asn Ile Ser Thr	Trp 290	Val Tyr Ser Ser	Pro 295	Gly Arg His Glu	Gly 300
Gln Glu Pro Phe	Leu 305	Gln Trp Leu Met	Leu 310	Leu Ser Asn Glu	Ser 315
Ala Leu Pro His	Val 320	His Thr Val Ser	Tyr 325	Gly Asp Asp Glu	Asp 330
Ser Leu Ser Ser	Ala 335	Tyr Ile Gln Arg	Val 340	Asn Thr Glu Leu	Met 345
Lys Ala Ala Ala	Arg 350	Gly Leu Thr Leu	Leu 355	Phe Ala Ser Gly	Asp 360
Ser Gly Ala Gly	Cys 365	Trp Ser Val Ser	Gly 370	Arg His Gln Phe	Arg 375
Pro Thr Phe Pro	Ala 380	Ser Ser Pro Tyr	Val 385	Thr Thr Val Gly	Gly 390
Thr Ser Phe Gln	Glu 395	Pro Phe Leu Ile	Thr 400	Asn Glu Ile Val	Asp 405
Tyr Ile Ser Gly	Gly 410	Gly Phe Ser Asn	Val 415	Phe Pro Arg Pro	Ser 420
Tyr Gln Glu Glu	Ala 425	Val Thr Lys Phe	Leu 430	Ser Ser Ser Pro	His 435

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Pro Pro Ser Ser Tyr Phe Asn Ala Ser Gly Arg Ala Tyr Pro
440 445 450
Asp Val Ala Ala Leu Ser Asp Gly Tyr Trp Val Val Ser Asn Arg
455 460 465
Val Pro Ile Pro Trp Val Ser Gly Thr Ser Ala Ser Thr Pro Val
470 475 480
Phe Gly Gly Ile Leu Ser Leu Ile Asn Glu His Arg Ile Leu Ser
485 490 495
Gly Arg Pro Pro Leu Gly Phe Leu Asn Pro Arg Leu Tyr Gln Gln
500 505 510
His Gly Ala Gly Leu Phe Asp Val Thr Arg Gly Cys His Glu Ser
515 520 525
Cys Leu Asp Glu Glu Val Glu Gly Gln Gly Phe Cys Ser Gly Pro
530 535 540
Gly Trp Asp Pro Val Thr Gly Trp Gly Thr Pro Thr Ser Gln Leu
545 550 555

Cys

<210> 260
<211> 1638
<212> DNA
<213> Homo Sapien

<400> 260
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attccagggc tcctcttctt tctcttcttt ctgctctgtg ctgttgggca 150
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tccctgtcgt cttgccccag tctaccctca atttagccaa gccagacttt 250
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taagggaact ccactgcccc cttacgaaga ggccaagcaa tatctgtctt 350
atgaaacgct ctatgccaat ggcagccgca cagagacgca ggtgggcatc 400
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tcagcatttt tgggaaggac ttctgtctca actacccttt ctcaacatca 550
gtgaagtatt ccacgggctg caccggcacc ctggtggcag agaagcatgt 600
cctcacagct gccactgca tacacgatgg aaaaacctat gtgaaaggaa 650
cccagaagct tcgagtgggc ttctaaagc ccaagtttaa agatggtggt 700
cgagggggcca acgactccac ttcagccatg cccgagcaga tgaaatttca 750

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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 aagccccaca agagaaaatt tatgaagatt ggggtgagcc ctctgctaa 900
 gcagctgccca gggggcagaa ttcacttctc tggttatgac aatgaccgac 950
 caggcaatth ggtgtatcgc ttctgtgacg tcaaagacga gacctatgac 1000
 ttgctctacc agcaatgcga tgcccagcca ggggccagcg ggtctgggg 1050
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 ttggcatttt ttcagggcac cagtgggtgg acatgaatgg ttccccacag 1150
 gatttcaacg tggctgtcag aatcactcct ctcaaatacg cccagatttg 1200
 ctattggatt aaaggaaact acctggattg tagggagggg tgacacagt 1250
 ttccctcctg gcagcaatta agggctctca tgttcttatt ttaggagagg 1300
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 tttggggcaa tgaggaatat ttgacaatta agttaatctt cacgtttttg 1550
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 atatttgga tacaagagat atgaaaaaaaa aaaaaaaaa 1638

<210> 261
 <211> 383
 <212> PRT
 <213> Homo Sapien

<400> 261
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 Cys Ala Val Gly Gln Val Ser Pro Tyr Ser Ala Pro Trp Lys Pro
 20 25 30
 Thr Trp Pro Ala Tyr Arg Leu Pro Val Val Leu Pro Gln Ser Thr
 35 40 45
 Leu Asn Leu Ala Lys Pro Asp Phe Gly Ala Glu Ala Lys Leu Glu
 50 55 60
 Val Ser Ser Ser Cys Gly Pro Gln Cys His Lys Gly Thr Pro Leu
 65 70 75
 Pro Thr Tyr Glu Glu Ala Lys Gln Tyr Leu Ser Tyr Glu Thr Leu
 80 85 90
 Tyr Ala Asn Gly Ser Arg Thr Glu Thr Gln Val Gly Ile Tyr Ile
 95 100 105

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Leu Ser Ser Ser	Gly 110	Asp Gly Ala Gln	His 115	Arg Asp Ser Gly	Ser 120
Ser Gly Lys Ser	Arg 125	Arg Lys Arg Gln	Ile 130	Tyr Gly Tyr Asp	Ser 135
Arg Phe Ser Ile	Phe 140	Gly Lys Asp Phe	Leu 145	Leu Asn Tyr Pro	Phe 150
Ser Thr Ser Val	Lys 155	Leu Ser Thr Gly	Cys 160	Thr Gly Thr Leu	Val 165
Ala Glu Lys His	Val 170	Leu Thr Ala Ala	His 175	Cys Ile His Asp	Gly 180
Lys Thr Tyr Val	Lys 185	Gly Thr Gln Lys	Leu 190	Arg Val Gly Phe	Leu 195
Lys Pro Lys Phe	Lys 200	Asp Gly Gly Arg	Gly 205	Ala Asn Asp Ser	Thr 210
Ser Ala Met Pro	Glu 215	Gln Met Lys Phe	Gln 220	Trp Ile Arg Val	Lys 225
Arg Thr His Val	Pro 230	Lys Gly Trp Ile	Lys 235	Gly Asn Ala Asn	Asp 240
Ile Gly Met Asp	Tyr 245	Asp Tyr Ala Leu	Leu 250	Glu Leu Lys Lys	Pro 255
His Lys Arg Lys	Phe 260	Met Lys Ile Gly	Val 265	Ser Pro Pro Ala	Lys 270
Gln Leu Pro Gly	Gly 275	Arg Ile His Phe	Ser 280	Gly Tyr Asp Asn	Asp 285
Arg Pro Gly Asn	Leu 290	Val Tyr Arg Phe	Cys 295	Asp Val Lys Asp	Glu 300
Thr Tyr Asp Leu	Leu 305	Tyr Gln Gln Cys	Asp 310	Ala Gln Pro Gly	Ala 315
Ser Gly Ser Gly	Val 320	Tyr Val Arg Met	Trp 325	Lys Arg Gln Gln	Gln 330
Lys Trp Glu Arg	Lys 335	Ile Ile Gly Ile	Phe 340	Ser Gly His Gln	Trp 345
Val Asp Met Asn	Gly 350	Ser Pro Gln Asp	Phe 355	Asn Val Ala Val	Arg 360
Ile Thr Pro Leu	Lys 365	Tyr Ala Gln Ile	Cys 370	Tyr Trp Ile Lys	Gly 375
Asn Tyr Leu Asp	Cys 380	Arg Glu Gly			

<210> 262
 <211> 1378
 <212> DNA
 <213> Homo Sapien

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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accttcacct ccctgctgct gctggcgctcg acagccatcc tcaatgcggc 150
caggatacct gttccccag cctgtgggaa gccccagcag ctgaaccggg 200
ttgtgggagg cgaggacagc actgacagcg agtggccctg gatcgtgagc 250
atccagaaga atgggaccca cactgcgca ggttctctgc tcaccagccg 300
ctgggtgatc actgctgccc actgtttcaa ggacaacctg aacaaaccat 350
acctgttctc tgtgctgctg ggggcctggc agctggggaa ccctggctct 400
cgggtcccaga aggtgggtgt tgcctgggtg gagccccacc ctgtgtattc 450
ctggaaggaa ggtgcctgtg cagacattgc cctggtgcgt ctcgagcgct 500
ccatacagtt ctgagagcgg gtcctgccc tctgcctacc tgatgcctct 550
atccacctcc ctccaaacac cactgctgg atctcaggct gggggagcat 600
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ggggtggggc cctcagggca ccgagccagg gctctggggc cgccgcgcgc 1000
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catcaggccc cgcccaacgg cctcatgtcc ccgccccac gacttccggc 1250
cccgcccccg ggccccagcg cttttgtgta tataaatgtt aatgattttt 1300
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ataaattatt tattctcaa aaaaaaaa 1378

<210> 263
<211> 317
<212> PRT
<213> Homo Sapien

<400> 263

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 1          5          10          15
Gly Thr Phe Thr Ser Leu Leu Leu Leu Ala Ser Thr Ala Ile Leu
          20          25          30
Asn Ala Ala Arg Ile Pro Val Pro Pro Ala Cys Gly Lys Pro Gln
          35          40          45
Gln Leu Asn Arg Val Val Gly Gly Glu Asp Ser Thr Asp Ser Glu
          50          55          60
Trp Pro Trp Ile Val Ser Ile Gln Lys Asn Gly Thr His His Cys
          65          70          75
Ala Gly Ser Leu Leu Thr Ser Arg Trp Val Ile Thr Ala Ala His
          80          85          90
Cys Phe Lys Asp Asn Leu Asn Lys Pro Tyr Leu Phe Ser Val Leu
          95          100          105
Leu Gly Ala Trp Gln Leu Gly Asn Pro Gly Ser Arg Ser Gln Lys
          110          115          120
Val Gly Val Ala Trp Val Glu Pro His Pro Val Tyr Ser Trp Lys
          125          130          135
Glu Gly Ala Cys Ala Asp Ile Ala Leu Val Arg Leu Glu Arg Ser
          140          145          150
Ile Gln Phe Ser Glu Arg Val Leu Pro Ile Cys Leu Pro Asp Ala
          155          160          165
Ser Ile His Leu Pro Pro Asn Thr His Cys Trp Ile Ser Gly Trp
          170          175          180
Gly Ser Ile Gln Asp Gly Val Pro Leu Pro His Pro Gln Thr Leu
          185          190          195
Gln Lys Leu Lys Val Pro Ile Ile Asp Ser Glu Val Cys Ser His
          200          205          210
Leu Tyr Trp Arg Gly Ala Gly Gln Gly Pro Ile Thr Glu Asp Met
          215          220          225
Leu Cys Ala Gly Tyr Leu Glu Gly Glu Arg Asp Ala Cys Leu Gly
          230          235          240
Asp Ser Gly Gly Pro Leu Met Cys Gln Val Asp Gly Ala Trp Leu
          245          250          255
Leu Ala Gly Ile Ile Ser Trp Gly Glu Gly Cys Ala Glu Arg Asn
          260          265          270
Arg Pro Gly Val Tyr Ile Ser Leu Ser Ala His Arg Ser Trp Val
          275          280          285
Glu Lys Ile Val Gln Gly Val Gln Leu Arg Gly Arg Ala Gln Gly
          290          295          300
Gly Gly Ala Leu Arg Ala Pro Ser Gln Gly Ser Gly Ala Ala Ala
          305          310          315

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Arg Ser

<210> 264

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 264

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<210> 265

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 265

gcagagggtgt ctaagggtg 19

<210> 266

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 266

agctctagac caatgccagc ttcc 24

<210> 267

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 267

gccaccaact cctgcaagaa cttctcagaa ctgcccctgg tcatg 45

<210> 268

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 268

ggggaattca ccctatgaca ttgcc 25

<210> 269

<211> 24

<212> DNA

<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<220>
<223> Synthetic Oligonucleotide Probe

<400> 269
    gaatgccctg caagcatcaa ctgg 24

<210> 270
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 270
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<210> 271
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 271
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<210> 272
<211> 18
<212> DNA
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<220>
<223> Synthetic Oligonucleotide Probe

<400> 272
    cagccctgcc acatgtgc 18

<210> 273
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 273
    tactgggtgg tcagcaac 18

<210> 274
<211> 24
<212> DNA
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<220>
<223> Synthetic Oligonucleotide Probe

<400> 274
    ggcgaagagc aggggtgagac cccg 24

<210> 275
<211> 45
    
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<212> DNA
<213> Artificial Sequence

<220>
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<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 276
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<210> 277
<211> 18
<212> DNA
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<220>
<223> Synthetic Oligonucleotide Probe

<400> 277
ggctatgaca gcaggttc 18

<210> 278
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 278
tgacaatgac cgaccagg 18

<210> 279
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 279
gcatcgatt gctggttagag caag 24

<210> 280
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 280

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
ttacagtgcc ccctggaac ccacttggcc tgcataccgc ctccc 45

<210> 281

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 281

cgtctcgagc gctccataca gttcccttgc ccca 34

<210> 282

<211> 61

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 282

tggaggggga gcgggatgct tgtctgggcg actccggggg ccccctcatg 50

tgccaggtgg a 61

<210> 283

<211> 119

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 283

ccctcagacc ctgcagaagc tgaaggttcc tatcatcgac tcggaagtct 50

gcagccatct gtactggcgg ggagcaggac agggacccat cactgaggac 100

atgctgtgtg ccggctact 119

<210> 284

<211> 1875

<212> DNA

<213> Homo Sapien

<400> 284

gacggctggc caccatgcac ggctcctgca gtttcctgat gcttctgctg 50

ccgctactgc tactgctggt ggccaccaca ggccccgttg gagccctcac 100

agatgaggag aaacgtttga tgggtggagct gcacaacctc taccggggccc 150

aggtatcccc gacggcctca gacatgctgc acatgagatg ggacgaggag 200

ctggccgcct tcgccaaggc ctacgcacgg cagtgcgtgt ggggccacaa 250

caaggagcgc gggcgccgcg gcgagaatct gttcgccatc acagacgagg 300

gcatggacgt gccgctggcc atggaggagt ggcaccacga gcgtgagcac 350

tacaacctca gcgccgccac ctgcagccca ggccagatgt gcggccacta 400

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

cacgcaggtg gtatgggcca agacagagag gatcggctgt ggttcccact 450
 tctgtgagaa gctccagggg gttgaggaga ccaacatcga attactggtg 500
 tgcaactatg agcctccggg gaacgtgaag gggaaacggc cctaccagga 550
 ggggactccg tgctcccaat gtccctcttg ctaccactgc aagaactccc 600
 tctgtgaacc catcggaagc ccggaagatg ctcaggattt gccttacctg 650
 gtaactgagg ccccatcctt ccgggcgact gaagcatcag actctaggaa 700
 aatgggtact ctttcttccc tagcaacggg gattccggct ttcttggtaa 750
 cagaggtctc aggctccctg gcaaccaagg ctctgcctgc tgtggaaacc 800
 caggcccaa cttccttagc aacgaaagac ccgccctcca tggcaacaga 850
 ggctccacct tgcgtaacaa ctgaggtccc ttccattttg gcagctcaca 900
 gcctgcctc cttggatgag gagccagtta ctttcccaa atcgacccat 950
 gttcctatcc caaaatcagc agacaaagt acagacaaaa caaaagtgcc 1000
 ctctaggagc ccagagaact ctctggaccc caagatgtcc ctgacagggg 1050
 caagggaact cctaccccat gccaggagg aggctgaggc tgaggctgag 1100
 ttgcctcctt ccagtgaggt cttggcctca gtttttccag cccaggacaa 1150
 gccaggtgag ctgcaggcca cactggacca cacggggcac acctcctcca 1200
 agtcctgcc caatttcccc aatacctctg ccaccgctaa tgccacgggt 1250
 gggcgtgccc tggctctgca gtcgtccttg ccagggtgag agggccctga 1300
 caagcctagc gttgtgtcag ggctgaactc gggccctggt catgtgtggg 1350
 gccctctcct gggactactg ctctgcctc ctctggtgtt ggctggaatc 1400
 ttctgaatgg gataccactc aaagggtgaa gaggtcagct gtcctcctgt 1450
 catcttcccc acctgtctcc cagcccctaa acaagatact tcttggttaa 1500
 ggccctccgg aagggaagg ctacggggca tgtgcctcat cacaccatcc 1550
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 ggactgcaca ccggggccac acctctctctg cccctccctc ctgagtctg 1650
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 tgccacaca gcatgtgcgc tctccctgag tgctgtgta gctggggatg 1750
 gggattccta ggggcagatg aaggacaagc cccactggag tggggttctt 1800
 tgagtggggg aggcaggagc gagggaagga aagtaactcc tgactctcca 1850
 ataaaaacct gtccaacctg tgaaa 1875

<210> 285

<211> 463

<212> PRT

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<213> Homo Sapien

<400> 285

Met	His	Gly	Ser	Cys	Ser	Phe	Leu	Met	Leu	Leu	Leu	Pro	Leu	Leu	1	5	10	15
Leu	Leu	Leu	Val	Ala	Thr	Thr	Gly	Pro	Val	Gly	Ala	Leu	Thr	Asp	20	25	30	
Glu	Glu	Lys	Arg	Leu	Met	Val	Glu	Leu	His	Asn	Leu	Tyr	Arg	Ala	35	40	45	
Gln	Val	Ser	Pro	Thr	Ala	Ser	Asp	Met	Leu	His	Met	Arg	Trp	Asp	50	55	60	
Glu	Glu	Leu	Ala	Ala	Phe	Ala	Lys	Ala	Tyr	Ala	Arg	Gln	Cys	Val	65	70	75	
Trp	Gly	His	Asn	Lys	Glu	Arg	Gly	Arg	Arg	Gly	Glu	Asn	Leu	Phe	80	85	90	
Ala	Ile	Thr	Asp	Glu	Gly	Met	Asp	Val	Pro	Leu	Ala	Met	Glu	Glu	95	100	105	
Trp	His	His	Glu	Arg	Glu	His	Tyr	Asn	Leu	Ser	Ala	Ala	Thr	Cys	110	115	120	
Ser	Pro	Gly	Gln	Met	Cys	Gly	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	125	130	135	
Lys	Thr	Glu	Arg	Ile	Gly	Cys	Gly	Ser	His	Phe	Cys	Glu	Lys	Leu	140	145	150	
Gln	Gly	Val	Glu	Glu	Thr	Asn	Ile	Glu	Leu	Leu	Val	Cys	Asn	Tyr	155	160	165	
Glu	Pro	Pro	Gly	Asn	Val	Lys	Gly	Lys	Arg	Pro	Tyr	Gln	Glu	Gly	170	175	180	
Thr	Pro	Cys	Ser	Gln	Cys	Pro	Ser	Gly	Tyr	His	Cys	Lys	Asn	Ser	185	190	195	
Leu	Cys	Glu	Pro	Ile	Gly	Ser	Pro	Glu	Asp	Ala	Gln	Asp	Leu	Pro	200	205	210	
Tyr	Leu	Val	Thr	Glu	Ala	Pro	Ser	Phe	Arg	Ala	Thr	Glu	Ala	Ser	215	220	225	
Asp	Ser	Arg	Lys	Met	Gly	Thr	Pro	Ser	Ser	Leu	Ala	Thr	Gly	Ile	230	235	240	
Pro	Ala	Phe	Leu	Val	Thr	Glu	Val	Ser	Gly	Ser	Leu	Ala	Thr	Lys	245	250	255	
Ala	Leu	Pro	Ala	Val	Glu	Thr	Gln	Ala	Pro	Thr	Ser	Leu	Ala	Thr	260	265	270	
Lys	Asp	Pro	Pro	Ser	Met	Ala	Thr	Glu	Ala	Pro	Pro	Cys	Val	Thr	275	280	285	
Thr	Glu	Val	Pro	Ser	Ile	Leu	Ala	Ala	His	Ser	Leu	Pro	Ser	Leu	290	295	300	

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Asp Glu Glu Pro Val Thr Phe Pro Lys Ser Thr His Val Pro Ile
305 310 315

Pro Lys Ser Ala Asp Lys Val Thr Asp Lys Thr Lys Val Pro Ser
320 325 330

Arg Ser Pro Glu Asn Ser Leu Asp Pro Lys Met Ser Leu Thr Gly
335 340 345

Ala Arg Glu Leu Leu Pro His Ala Gln Glu Glu Ala Glu Ala Glu
350 355 360

Ala Glu Leu Pro Pro Ser Ser Glu Val Leu Ala Ser Val Phe Pro
365 370 375

Ala Gln Asp Lys Pro Gly Glu Leu Gln Ala Thr Leu Asp His Thr
380 385 390

Gly His Thr Ser Ser Lys Ser Leu Pro Asn Phe Pro Asn Thr Ser
395 400 405

Ala Thr Ala Asn Ala Thr Gly Gly Arg Ala Leu Ala Leu Gln Ser
410 415 420

Ser Leu Pro Gly Ala Glu Gly Pro Asp Lys Pro Ser Val Val Ser
425 430 435

Gly Leu Asn Ser Gly Pro Gly His Val Trp Gly Pro Leu Leu Gly
440 445 450

Leu Leu Leu Leu Pro Pro Leu Val Leu Ala Gly Ile Phe
455 460

<210> 286

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 286

tcctgcagtt tcctgatgc 19

<210> 287

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 287

ctcatattgc acaccagtaa ttcg 24

<210> 288

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<400> 288
atgaggagaa acgtttgatg gtggagctgc acaacctcta ccggg 45

<210> 289
<211> 3662
<212> DNA
<213> Homo Sapien

<400> 289
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tcatttcca agttatggtg gacgtacttc tgttgttctc cctctgcttg 100
ctttttcaca ttagcagacc ggacttaagt cacaacagat tatctttcat 150
caaggcaagt tccatgagcc accttcaaag ctttcgagaa gtgaaactga 200
acaacaatga attggagacc attccaaatc tgggaccagt ctcggcaaat 250
attacacttc tctccttggc tggaacacagg attgttgaaa tactccctga 300
acatctgaaa gagtttcagt cccttgaaac tttggacctt agcagcaaca 350
atatttcaga gtcctaaact gcattttccag ccctacagct caaatatctg 400
tatctcaaca gcaaccgagt cacatcaatg gaacctgggt attttgacaa 450
tttggccaac acactccttg tgtaaagct gaacaggaac cgaatctcag 500
ctatcccacc caagatgttt aaactgcccc aactgcaaca tctcgaattg 550
aaccgaaaca agattaaaaa tgtagatgga ctgacattcc aaggccttgg 600
tgctctgaag tctctgaaaa tgcaaagaaa tggagtaacg aaacttatgg 650
atggagcttt ttgggggctg agcaacatgg aaattttgca gctggaccat 700
aacaacctaa cagagattac caaaggctgg ctttacggct tgctgatgct 750
gcaggaactt catctcagcc aaaatgccat caacaggatc agccctgatg 800
cctgggagtt ctgccagaag ctcagtgagc tggacctaac tttcaatcac 850
ttatcaaggt tagatgattc aagcttcctt ggcctaagct tactaaatac 900
actgcacatt gggacaaca gagtcagcta cattgctgat tgtgccttcc 950
gggggctttc cagtttaaag actttggatc tgaagaacaa tgaaatttcc 1000
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gcgactgata ctccaaggaa atcggatccg ttctattact aaaaaagcct 1100
tcaactggtt ggatgcattg gagcatctag acctgagtga caacgcaatc 1150
atgtctttac aaggcaatgc attttcacaa atgaagaaac tgcaacaatt 1200
gcatttaaat acatcaagcc ttttgtgcga ttgccagcta aaatggctcc 1250
cacagtgggt ggcggaaaac aactttcaga gctttgtaaa tgccagttgt 1300
gcccacctc agctgctaaa aggaagaagc atttttgctg ttagcccaga 1350

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 aaacacagtc ggcaataaaa ggttccaatt tgagtttcat ctgctcagct 1450
 gccagcagca gtgattcccc aatgactttt gcttggaata aagacaatga 1500
 actactgcat gatgctgaaa tggaaaatta tgcacacctc cgggcccaag 1550
 gtggcgaggt gatggagtat accaccatcc ttcggctgcg cgaggtggaa 1600
 tttgccagtg aggggaaata tcagtgtgtc atctccaatc actttgggtc 1650
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 ccgaggatga cgtgttcttt atcgtggatg tgaagataga ggacattggg 1900
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 aactctgact gtcctagaaa caccatcatt tttgcggcca ctgttggacc 2000
 gaactgtaac caaggagaaa acagccgtcc tacagtgcac tgctggagga 2050
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 aaccgagagg cacttttttg cagcaggcaa tcagcttctg attattgtgg 2150
 actcagatgt cagtgatgct gggaaatata catgtgagat gtctaacc 2200
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 gtggccttca catgtgagga agctacttaa cactagttac tctcacaatg 2900
 aaggacctgg aatgaaaaat ctgtgtctaa acaagtcctc tttagatttt 2950

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

agtgcaaadc cagagccagc gtcggttgcc tcgagtaatt ctttcatggg 3000
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 ttggacagcc atcagattgt cagccaagag ctttttattt gaaagctcat 3100
 tcttccccag acttggactc tgggtcagag gaagatggga aagaaaggac 3150
 agattttcag gaagaaaadc acatttgtac ctttaaacag acttttagaaa 3200
 actacaggac tccaaatttt cagtcttatg acttggacac atagactgaa 3250
 tgagaccaa ggaagagctt aacatactac ctcaagtga cttttattta 3300
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 taaatcatga ttattttatg tatttttata atgccagatt tctttttatg 3550
 gaaaatgagt tactaaagca ttttaaataa tacctgcctt gtaccatttt 3600
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 tgtcaatttg aa 3662

<210> 290
 <211> 1059
 <212> PRT
 <213> Homo Sapien

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 Ile Ser Arg Pro Asp Leu Ser His Asn Arg Leu Ser Phe Ile Lys
 20 25 30
 Ala Ser Ser Met Ser His Leu Gln Ser Leu Arg Glu Val Lys Leu
 35 40 45
 Asn Asn Asn Glu Leu Glu Thr Ile Pro Asn Leu Gly Pro Val Ser
 50 55 60
 Ala Asn Ile Thr Leu Leu Ser Leu Ala Gly Asn Arg Ile Val Glu
 65 70 75
 Ile Leu Pro Glu His Leu Lys Glu Phe Gln Ser Leu Glu Thr Leu
 80 85 90
 Asp Leu Ser Ser Asn Asn Ile Ser Glu Leu Gln Thr Ala Phe Pro
 95 100 105
 Ala Leu Gln Leu Lys Tyr Leu Tyr Leu Asn Ser Asn Arg Val Thr
 110 115 120
 Ser Met Glu Pro Gly Tyr Phe Asp Asn Leu Ala Asn Thr Leu Leu
 125 130 135

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Val	Leu	Lys	Leu	Asn	Arg	Asn	Arg	Ile	Ser	Ala	Ile	Pro	Pro	Lys	140	145	150
Met	Phe	Lys	Leu	Pro	Gln	Leu	Gln	His	Leu	Glu	Leu	Asn	Arg	Asn	155	160	165
Lys	Ile	Lys	Asn	Val	Asp	Gly	Leu	Thr	Phe	Gln	Gly	Leu	Gly	Ala	170	175	180
Leu	Lys	Ser	Leu	Lys	Met	Gln	Arg	Asn	Gly	Val	Thr	Lys	Leu	Met	185	190	195
Asp	Gly	Ala	Phe	Trp	Gly	Leu	Ser	Asn	Met	Glu	Ile	Leu	Gln	Leu	200	205	210
Asp	His	Asn	Asn	Leu	Thr	Glu	Ile	Thr	Lys	Gly	Trp	Leu	Tyr	Gly	215	220	225
Leu	Leu	Met	Leu	Gln	Glu	Leu	His	Leu	Ser	Gln	Asn	Ala	Ile	Asn	230	235	240
Arg	Ile	Ser	Pro	Asp	Ala	Trp	Glu	Phe	Cys	Gln	Lys	Leu	Ser	Glu	245	250	255
Leu	Asp	Leu	Thr	Phe	Asn	His	Leu	Ser	Arg	Leu	Asp	Asp	Ser	Ser	260	265	270
Phe	Leu	Gly	Leu	Ser	Leu	Leu	Asn	Thr	Leu	His	Ile	Gly	Asn	Asn	275	280	285
Arg	Val	Ser	Tyr	Ile	Ala	Asp	Cys	Ala	Phe	Arg	Gly	Leu	Ser	Ser	290	295	300
Leu	Lys	Thr	Leu	Asp	Leu	Lys	Asn	Asn	Glu	Ile	Ser	Trp	Thr	Ile	305	310	315
Glu	Asp	Met	Asn	Gly	Ala	Phe	Ser	Gly	Leu	Asp	Lys	Leu	Arg	Arg	320	325	330
Leu	Ile	Leu	Gln	Gly	Asn	Arg	Ile	Arg	Ser	Ile	Thr	Lys	Lys	Ala	335	340	345
Phe	Thr	Gly	Leu	Asp	Ala	Leu	Glu	His	Leu	Asp	Leu	Ser	Asp	Asn	350	355	360
Ala	Ile	Met	Ser	Leu	Gln	Gly	Asn	Ala	Phe	Ser	Gln	Met	Lys	Lys	365	370	375
Leu	Gln	Gln	Leu	His	Leu	Asn	Thr	Ser	Ser	Leu	Leu	Cys	Asp	Cys	380	385	390
Gln	Leu	Lys	Trp	Leu	Pro	Gln	Trp	Val	Ala	Glu	Asn	Asn	Phe	Gln	395	400	405
Ser	Phe	Val	Asn	Ala	Ser	Cys	Ala	His	Pro	Gln	Leu	Leu	Lys	Gly	410	415	420
Arg	Ser	Ile	Phe	Ala	Val	Ser	Pro	Asp	Gly	Phe	Val	Cys	Asp	Asp	425	430	435
Phe	Pro	Lys	Pro	Gln	Ile	Thr	Val	Gln	Pro	Glu	Thr	Gln	Ser	Ala			

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ile Lys Gly Ser	Asn	Leu Ser Phe Ile	Cys	Ser Ala Ala Ser	Ser
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Ser Asp Ser Pro Met Thr Phe Ala Trp		Lys Lys Asp Asn Glu	Leu		
	470		475		480
Leu His Asp Ala Glu Met Glu Asn Tyr		Ala His Leu Arg Ala	Gln		
	485		490		495
Gly Gly Glu Val Met Glu Tyr Thr Thr		Ile Leu Arg Leu Arg	Glu		
	500		505		510
Val Glu Phe Ala Ser Glu Gly Lys Tyr		Gln Cys Val Ile Ser	Asn		
	515		520		525
His Phe Gly Ser Ser Tyr Ser Val Lys		Ala Lys Leu Thr Val	Asn		
	530		535		540
Met Leu Pro Ser Phe Thr Lys Thr Pro		Met Asp Leu Thr Ile	Arg		
	545		550		555
Ala Gly Ala Met Ala Arg Leu Glu Cys		Ala Ala Val Gly His	Pro		
	560		565		570
Ala Pro Gln Ile Ala Trp Gln Lys Asp		Gly Gly Thr Asp Phe	Pro		
	575		580		585
Ala Ala Arg Glu Arg Arg Met His Val		Met Pro Glu Asp Asp	Val		
	590		595		600
Phe Phe Ile Val Asp Val Lys Ile Glu		Asp Ile Gly Val Tyr	Ser		
	605		610		615
Cys Thr Ala Gln Asn Ser Ala Gly Ser		Ile Ser Ala Asn Ala	Thr		
	620		625		630
Leu Thr Val Leu Glu Thr Pro Ser Phe		Leu Arg Pro Leu Leu	Asp		
	635		640		645
Arg Thr Val Thr Lys Gly Glu Thr Ala		Val Leu Gln Cys Ile	Ala		
	650		655		660
Gly Gly Ser Pro Pro Pro Lys Leu Asn		Trp Thr Lys Asp Asp	Ser		
	665		670		675
Pro Leu Val Val Thr Glu Arg His Phe		Phe Ala Ala Gly Asn	Gln		
	680		685		690
Leu Leu Ile Ile Val Asp Ser Asp Val		Ser Asp Ala Gly Lys	Tyr		
	695		700		705
Thr Cys Glu Met Ser Asn Thr Leu Gly		Thr Glu Arg Gly Asn	Val		
	710		715		720
Arg Leu Ser Val Ile Pro Thr Pro Thr		Cys Asp Ser Pro Gln	Met		
	725		730		735
Thr Ala Pro Ser Leu Asp Asp Asp Gly		Trp Ala Thr Val Gly	Val		
	740		745		750

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Val Ile Ile Ala Val Val Cys Cys Val Val Gly Thr Ser Leu Val
755 760 765

Trp Val Val Ile Ile Tyr His Thr Arg Arg Arg Asn Glu Asp Cys
770 775 780

Ser Ile Thr Asn Thr Asp Glu Thr Asn Leu Pro Ala Asp Ile Pro
785 790 795

Ser Tyr Leu Ser Ser Gln Gly Thr Leu Ala Asp Arg Gln Asp Gly
800 805 810

Tyr Val Ser Ser Glu Ser Gly Ser His His Gln Phe Val Thr Ser
815 820 825

Ser Gly Ala Gly Phe Phe Leu Pro Gln His Asp Ser Ser Gly Thr
830 835 840

Cys His Ile Asp Asn Ser Ser Glu Ala Asp Val Glu Ala Ala Thr
845 850 855

Asp Leu Phe Leu Cys Pro Phe Leu Gly Ser Thr Gly Pro Met Tyr
860 865 870

Leu Lys Gly Asn Val Tyr Gly Ser Asp Pro Phe Glu Thr Tyr His
875 880 885

Thr Gly Cys Ser Pro Asp Pro Arg Thr Val Leu Met Asp His Tyr
890 895 900

Glu Pro Ser Tyr Ile Lys Lys Lys Glu Cys Tyr Pro Cys Ser His
905 910 915

Pro Ser Glu Glu Ser Cys Glu Arg Ser Phe Ser Asn Ile Ser Trp
920 925 930

Pro Ser His Val Arg Lys Leu Leu Asn Thr Ser Tyr Ser His Asn
935 940 945

Glu Gly Pro Gly Met Lys Asn Leu Cys Leu Asn Lys Ser Ser Leu
950 955 960

Asp Phe Ser Ala Asn Pro Glu Pro Ala Ser Val Ala Ser Ser Asn
965 970 975

Ser Phe Met Gly Thr Phe Gly Lys Ala Leu Arg Arg Pro His Leu
980 985 990

Asp Ala Tyr Ser Ser Phe Gly Gln Pro Ser Asp Cys Gln Pro Arg
995 1000 1005

Ala Phe Tyr Leu Lys Ala His Ser Ser Pro Asp Leu Asp Ser Gly
1010 1015 1020

Ser Glu Glu Asp Gly Lys Glu Arg Thr Asp Phe Gln Glu Glu Asn
1025 1030 1035

His Ile Cys Thr Phe Lys Gln Thr Leu Glu Asn Tyr Arg Thr Pro
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Asn Phe Gln Ser Tyr Asp Leu Asp Thr
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 <211> 2906
 <212> DNA
 <213> Homo Sapien

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 gaagcttttt cttgtgagcc ctggatctta acacaaatgt gtatatgtgc 200
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 agaaaaaagt atgttcattt ttctctataa aggagaaagt gagccaagga 400
 gatatttttg gaatgaaaag tttggggctt ttttagtaaa gtaaagaact 450
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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cctgacatct gtatcttggg ttactccaaa tggaacagtc atgacacatg 2000
gggcgtacaa agtgcgagata gctgtgctca gtgatggtac gttaaatttc 2050
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 640

<212> PRT

<213> Homo Sapien

<400> 292

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 20      25      30
Leu Ala Leu Gln Leu Leu Val Val Ala Gly Leu Val Arg Ala Gln
 35      40      45
Thr Cys Pro Ser Val Cys Ser Cys Ser Asn Gln Phe Ser Lys Val
 50      55      60
Ile Cys Val Arg Lys Asn Leu Arg Glu Val Pro Asp Gly Ile Ser
 65      70      75
Thr Asn Thr Arg Leu Leu Asn Leu His Glu Asn Gln Ile Gln Ile
 80      85      90
Ile Lys Val Asn Ser Phe Lys His Leu Arg His Leu Glu Ile Leu
 95     100     105
Gln Leu Ser Arg Asn His Ile Arg Thr Ile Glu Ile Gly Ala Phe
110     115     120
Asn Gly Leu Ala Asn Leu Asn Thr Leu Glu Leu Phe Asp Asn Arg
125     130     135
Leu Thr Thr Ile Pro Asn Gly Ala Phe Val Tyr Leu Ser Lys Leu
140     145     150
Lys Glu Leu Trp Leu Arg Asn Asn Pro Ile Glu Ser Ile Pro Ser
155     160     165
Tyr Ala Phe Asn Arg Ile Pro Ser Leu Arg Arg Leu Asp Leu Gly
170     175     180
Glu Leu Lys Arg Leu Ser Tyr Ile Ser Glu Gly Ala Phe Glu Gly
185     190     195
Leu Ser Asn Leu Arg Tyr Leu Asn Leu Ala Met Cys Asn Leu Arg
200     205     210
Glu Ile Pro Asn Leu Thr Pro Leu Ile Lys Leu Asp Glu Leu Asp
215     220     225
Leu Ser Gly Asn His Leu Ser Ala Ile Arg Pro Gly Ser Phe Gln
230     235     240
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245     250     255
Gln Val Ile Glu Arg Asn Ala Phe Asp Asn Leu Gln Ser Leu Val
260     265     270
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275     280     285
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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				425					430					435
Thr	Ala	Ser	Ala	Thr	Leu	Asn	Val	Thr	Ala	Ala	Thr	Thr	Thr	Pro
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				500					505					510
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Thr	Lys	Ile	Ile	Ile	Gly	Cys	Phe	Val	Ala	Ile	Thr	Leu	Met	Ala
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Ala	Val	Met	Leu	Val	Ile	Phe	Tyr	Lys	Met	Arg	Lys	Gln	His	His
				545					550					555
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				560					565					570
Val	Asp	Asp	Glu	Ile	Thr	Gly	Asp	Thr	Pro	Met	Glu	Ser	His	Leu
				575					580					585
Pro	Met	Pro	Ala	Ile	Glu	His	Glu	His	Leu	Asn	His	Tyr	Asn	Ser
				590					595					600
Tyr	Lys	Ser	Pro	Phe	Asn	His	Thr	Thr	Thr	Val	Asn	Thr	Ile	Asn

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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Ser Lys Asp Asn Val Gln Glu Thr Gln Ile
635 640

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<211> 4053
<212> DNA

<213> Homo Sapien

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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Leu Leu Cys Ala Val Leu Gly Arg Ala Gly Arg Ser Asp Ser Gly
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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				50					55					60			
Ser	Arg	Lys	Arg	Leu	Ala	Arg	Leu	Pro	Glu	Pro	Leu	Pro	Ser	Trp			
				65					70					75			
Val	Ala	Arg	Leu	Asp	Leu	Ser	His	Asn	Arg	Leu	Ser	Phe	Ile	Lys			
				80					85					90			
Ala	Ser	Ser	Met	Ser	His	Leu	Gln	Ser	Leu	Arg	Glu	Val	Lys	Leu			
				95					100					105			
Asn	Asn	Asn	Glu	Leu	Glu	Thr	Ile	Pro	Asn	Leu	Gly	Pro	Val	Ser			
				110					115					120			
Ala	Asn	Ile	Thr	Leu	Leu	Ser	Leu	Ala	Gly	Asn	Arg	Ile	Val	Glu			
				125					130					135			
Ile	Leu	Pro	Glu	His	Leu	Lys	Glu	Phe	Gln	Ser	Leu	Glu	Thr	Leu			
				140					145					150			
Asp	Leu	Ser	Ser	Asn	Asn	Ile	Ser	Glu	Leu	Gln	Thr	Ala	Phe	Pro			
				155					160					165			
Ala	Leu	Gln	Leu	Lys	Tyr	Leu	Tyr	Leu	Asn	Ser	Asn	Arg	Val	Thr			
				170					175					180			
Ser	Met	Glu	Pro	Gly	Tyr	Phe	Asp	Asn	Leu	Ala	Asn	Thr	Leu	Leu			
				185					190					195			
Val	Leu	Lys	Leu	Asn	Arg	Asn	Arg	Ile	Ser	Ala	Ile	Pro	Pro	Lys			
				200					205					210			
Met	Phe	Lys	Leu	Pro	Gln	Leu	Gln	His	Leu	Glu	Leu	Asn	Arg	Asn			
				215					220					225			
Lys	Ile	Lys	Asn	Val	Asp	Gly	Leu	Thr	Phe	Gln	Gly	Leu	Gly	Ala			
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				245					250					255			
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Asp	His	Asn	Asn	Leu	Thr	Glu	Ile	Thr	Lys	Gly	Trp	Leu	Tyr	Gly			
				275					280					285			
Leu	Leu	Met	Leu	Gln	Glu	Leu	His	Leu	Ser	Gln	Asn	Ala	Ile	Asn			
				290					295					300			
Arg	Ile	Ser	Pro	Asp	Ala	Trp	Glu	Phe	Cys	Gln	Lys	Leu	Ser	Glu			
				305					310					315			
Leu	Asp	Leu	Thr	Phe	Asn	His	Leu	Ser	Arg	Leu	Asp	Asp	Ser	Ser			
				320					325					330			
Phe	Leu	Gly	Leu	Ser	Leu	Leu	Asn	Thr	Leu	His	Ile	Gly	Asn	Asn			

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 335 340 345

Arg Val Ser Tyr	Ile	Ala	Asp	Cys	Ala	Phe	Arg	Gly	Leu	Ser	Ser
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Leu Lys Thr Leu	Asp	Leu	Lys	Asn	Asn	Glu	Ile	Ser	Trp	Thr	Ile
	365					370					375
Glu Asp Met Asn	Gly	Ala	Phe	Ser	Gly	Leu	Asp	Lys	Leu	Arg	Arg
	380					385					390
Leu Ile Leu Gln	Gly	Asn	Arg	Ile	Arg	Ser	Ile	Thr	Lys	Lys	Ala
	395					400					405
Phe Thr Gly Leu	Asp	Ala	Leu	Glu	His	Leu	Asp	Leu	Ser	Asp	Asn
	410					415					420
Ala Ile Met Ser	Leu	Gln	Gly	Asn	Ala	Phe	Ser	Gln	Met	Lys	Lys
	425					430					435
Leu Gln Gln Leu	His	Leu	Asn	Thr	Ser	Ser	Leu	Leu	Cys	Asp	Cys
	440					445					450
Gln Leu Lys Trp	Leu	Pro	Gln	Trp	Val	Ala	Glu	Asn	Asn	Phe	Gln
	455					460					465
Ser Phe Val Asn	Ala	Ser	Cys	Ala	His	Pro	Gln	Leu	Leu	Lys	Gly
	470					475					480
Arg Ser Ile Phe	Ala	Val	Ser	Pro	Asp	Gly	Phe	Val	Cys	Asp	Asp
	485					490					495
Phe Pro Lys Pro	Gln	Ile	Thr	Val	Gln	Pro	Glu	Thr	Gln	Ser	Ala
	500					505					510
Ile Lys Gly Ser	Asn	Leu	Ser	Phe	Ile	Cys	Ser	Ala	Ala	Ser	Ser
	515					520					525
Ser Asp Ser Pro	Met	Thr	Phe	Ala	Trp	Lys	Lys	Asp	Asn	Glu	Leu
	530					535					540
Leu His Asp Ala	Glu	Met	Glu	Asn	Tyr	Ala	His	Leu	Arg	Ala	Gln
	545					550					555
Gly Gly Glu Val	Met	Glu	Tyr	Thr	Thr	Ile	Leu	Arg	Leu	Arg	Glu
	560					565					570
Val Glu Phe Ala	Ser	Glu	Gly	Lys	Tyr	Gln	Cys	Val	Ile	Ser	Asn
	575					580					585
His Phe Gly Ser	Ser	Tyr	Ser	Val	Lys	Ala	Lys	Leu	Thr	Val	Asn
	590					595					600
Met Leu Pro Ser	Phe	Thr	Lys	Thr	Pro	Met	Asp	Leu	Thr	Ile	Arg
	605					610					615
Ala Gly Ala Met	Ala	Arg	Leu	Glu	Cys	Ala	Ala	Val	Gly	His	Pro
	620					625					630
Ala Pro Gln Ile	Ala	Trp	Gln	Lys	Asp	Gly	Gly	Thr	Asp	Phe	Pro
	635					640					645
Ala Ala Arg Glu	Arg	Arg	Met	His	Val	Met	Pro	Glu	Asp	Asp	Val

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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Cys Thr Ala Gln	Asn 665	Ser Ala Gly Ser	Ile 670	Ser Ala Asn Ala	Thr 675
Leu Thr Val Leu	Glu 680	Thr Pro Ser Phe	Leu 685	Arg Pro Leu Leu	Asp 690
Arg Thr Val Thr	Lys 695	Gly Glu Thr Ala	Val 700	Leu Gln Cys Ile	Ala 705
Gly Gly Ser Pro	Pro 710	Pro Lys Leu Asn	Trp 715	Thr Lys Asp Asp	Ser 720
Pro Leu Val Val	Thr 725	Glu Arg His Phe	Phe 730	Ala Ala Gly Asn	Gln 735
Leu Leu Ile Ile	Val 740	Asp Ser Asp Val	Ser 745	Asp Ala Gly Lys	Tyr 750
Thr Cys Glu Met	Ser 755	Asn Thr Leu Gly	Thr 760	Glu Arg Gly Asn	Val 765
Arg Leu Ser Val	Ile 770	Pro Thr Pro Thr	Cys 775	Asp Ser Pro Gln	Met 780
Thr Ala Pro Ser	Leu 785	Asp Asp Asp Gly	Trp 790	Ala Thr Val Gly	Val 795
Val Ile Ile Ala	Val 800	Val Cys Cys Val	Val 805	Gly Thr Ser Leu	Val 810
Trp Val Val Ile	Ile 815	Tyr His Thr Arg	Arg 820	Arg Asn Glu Asp	Cys 825
Ser Ile Thr Asn	Thr 830	Asp Glu Thr Asn	Leu 835	Pro Ala Asp Ile	Pro 840
Ser Tyr Leu Ser	Ser 845	Gln Gly Thr Leu	Ala 850	Asp Arg Gln Asp	Gly 855
Tyr Val Ser Ser	Glu 860	Ser Gly Ser His	His 865	Gln Phe Val Thr	Ser 870
Ser Gly Ala Gly	Phe 875	Phe Leu Pro Gln	His 880	Asp Ser Ser Gly	Thr 885
Cys His Ile Asp	Asn 890	Ser Ser Glu Ala	Asp 895	Val Glu Ala Ala	Thr 900
Asp Leu Phe Leu	Cys 905	Pro Phe Leu Gly	Ser 910	Thr Gly Pro Met	Tyr 915
Leu Lys Gly Asn	Val 920	Tyr Gly Ser Asp	Pro 925	Phe Glu Thr Tyr	His 930
Thr Gly Cys Ser	Pro 935	Asp Pro Arg Thr	Val 940	Leu Met Asp His	Tyr 945
Glu Pro Ser Tyr	Ile 950	Lys Lys Lys Glu	Cys 955	Tyr Pro Cys Ser	His 960

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

965
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 980 985 990
 Pro Ser His Val Arg Lys Leu Leu Asn Thr Ser Tyr Ser His Asn
 995 1000 1005
 Glu Gly Pro Gly Met Lys Asn Leu Cys Leu Asn Lys Ser Ser Leu
 1010 1015 1020
 Asp Phe Ser Ala Asn Pro Glu Pro Ala Ser Val Ala Ser Ser Asn
 1025 1030 1035
 Ser Phe Met Gly Thr Phe Gly Lys Ala Leu Arg Arg Pro His Leu
 1040 1045 1050
 Asp Ala Tyr Ser Ser Phe Gly Gln Pro Ser Asp Cys Gln Pro Arg
 1055 1060 1065
 Ala Phe Tyr Leu Lys Ala His Ser Ser Pro Asp Leu Asp Ser Gly
 1070 1075 1080
 Ser Glu Glu Asp Gly Lys Glu Arg Thr Asp Phe Gln Glu Glu Asn
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<210> 296

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 296

cctaaactga actggacca 19

<210> 297

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 297

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
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<210> 298

<211> 24

<212> DNA

<213> Artificial Sequence

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<400> 298

acagctgcac agctcagaac agtg 24

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<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

<400> 299

cattcccagt ataaaaattt tc 22

<210> 300

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

<400> 300

gggtcttggt gaatgagg 18

<210> 301

<211> 24

<212> DNA

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<223> Synthetic Oligonucleotide Probe

<400> 301

gtgcctctcg gttaccacca atgg 24

<210> 302

<211> 50

<212> DNA

<213> Artificial Sequence

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<400> 302

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<211> 28

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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gcctttgaca accttcagtc actagtgg 28

<210> 304

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Synthetic Oligonucleotide Probe

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<210> 305

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 305

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<210> 306

<211> 24

<212> DNA

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<220>

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<210> 307

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 307

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<210> 308

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide Probe

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<210> 309

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 50

<212> DNA

<213> Artificial Sequence

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<210> 310

<211> 3296

<212> DNA

<213> Homo Sapien

<400> 310

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ctgctccacg aggcgccact ggtgtgaacc gggagagccc ctgggtggtc 200
ccgtccccta tccctccttt atatagaaac cttccacact gggaaggcag 250
cggcgaggca ggagggtca tggtagcaa ggaggccggc tgatctgcag 300
gcgcacagca ttccgagttt acagattttt acagatacca aatggaaggc 350
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atctgactcg gcaccccctg caggcaccat ggcccagagc cgggtgctgc 450
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 gtacctggat ctgtccagca acaacctgtc tcgggtccca gctgggctgc 1350
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<210> 311
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 311
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<210> 312
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<220>
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<400> 312
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<210> 313
 <211> 45
 <212> DNA
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<220>
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<400> 313
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<210> 314
 <211> 3003
 <212> DNA
 <213> Homo Sapien

<400> 314
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 at 3003

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 <211> 509
 <212> PRT
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 315

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 35          40          45
Trp Gly Trp Ala Arg Gln Ser Trp Gly Gln Cys Gln Pro Val Cys
 50          55          60
Gln Pro Arg Cys Lys His Gly Glu Cys Ile Gly Pro Asn Lys Cys
 65          70          75
Lys Cys His Pro Gly Tyr Ala Gly Lys Thr Cys Asn Gln Asp Leu
 80          85          90
Asn Glu Cys Gly Leu Lys Pro Arg Pro Cys Lys His Arg Cys Met
 95          100          105
Asn Thr Tyr Gly Ser Tyr Lys Cys Tyr Cys Leu Asn Gly Tyr Met
 110          115          120
Leu Met Pro Asp Gly Ser Cys Ser Ser Ala Leu Thr Cys Ser Met
 125          130          135
Ala Asn Cys Gln Tyr Gly Cys Asp Val Val Lys Gly Gln Ile Arg
 140          145          150
Cys Gln Cys Pro Ser Pro Gly Leu His Leu Ala Pro Asp Gly Arg
 155          160          165
Thr Cys Val Asp Val Asp Glu Cys Ala Thr Gly Arg Ala Ser Cys
 170          175          180
Pro Arg Phe Arg Gln Cys Val Asn Thr Phe Gly Ser Tyr Ile Cys
 185          190          195
Lys Cys His Lys Gly Phe Asp Leu Met Tyr Ile Gly Gly Lys Tyr
 200          205          210
Gln Cys His Asp Ile Asp Glu Cys Ser Leu Gly Gln Tyr Gln Cys
 215          220          225
Ser Ser Phe Ala Arg Cys Tyr Asn Val Arg Gly Ser Tyr Lys Cys
 230          235          240
Lys Cys Lys Glu Gly Tyr Gln Gly Asp Gly Leu Thr Cys Val Tyr
 245          250          255
Ile Pro Lys Val Met Ile Glu Pro Ser Gly Pro Ile His Val Pro
 260          265          270
Lys Gly Asn Gly Thr Ile Leu Lys Gly Asp Thr Gly Asn Asn Asn
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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	350	355	360
Ala Ser Thr Pro	Pro Gly Gly Ile Thr	Val Asp Asn Arg Val	Gln
	365	370	375
Thr Asp Pro Gln	Lys Pro Arg Gly Asp	Val Phe Ser Val Leu	Val
	380	385	390
His Ser Cys Asn	Phe Asp His Gly Leu	Cys Gly Trp Ile Arg	Glu
	395	400	405
Lys Asp Asn Asp	Leu His Trp Glu Pro	Ile Arg Asp Pro Ala	Gly
	410	415	420
Gly Gln Tyr Leu	Thr Val Ser Ala Ala	Lys Ala Pro Gly Gly	Lys
	425	430	435
Ala Ala Arg Leu	Val Leu Pro Leu Gly	Arg Leu Met His Ser	Gly
	440	445	450
Asp Leu Cys Leu	Ser Phe Arg His Lys	Val Thr Gly Leu His	Ser
	455	460	465
Gly Thr Leu Gln	Val Phe Val Arg Lys	His Gly Ala His Gly	Ala
	470	475	480
Ala Leu Trp Gly	Arg Asn Gly Gly His	Gly Trp Arg Gln Thr	Gln
	485	490	495
Ile Thr Leu Arg	Gly Ala Asp Ile Lys	Ser Glu Ser Gln Arg	
	500	505	

<210> 316

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 316

gatggttcct gctcaagtgc cctg 24

<210> 317

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 317

ttgcacttgt aggaccacg tacg 24

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 318

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 318

ctgatgggag gacctgtgta gatgttgatg aatgtgctac aggaagagcc 50

<210> 319

<211> 2110

<212> DNA

<213> Homo Sapien

<400> 319

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 caacaggtgc ttgctcgggg ctgaaggtga cagtgccatc acacactgtc 150
 catggcgtca gaggtcaggc cctctaccta cccgtccact atggcttcca 200
 cactccagca tcagacatcc agatcatatg gctatttgag agaccccaca 250
 caatgcccac atacttactg ggctctgtga ataagtctgt gggttcctgac 300
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 tatcaaccca ctgcagttcc ctgatgaagg caattacatc gtgaaggtca 400
 acattcaggg aaatggaact ctatctgcca gtcagaagat acaagtcacg 450
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 ggctgtggag tatgtgggga acatgaccct gacatgccat gtggaagggg 550
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 atcactatct ttgattatat ccatgtgtct tctcttctta tggaaaaaat 1150

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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cttcggaata tatgaatttg ttgcttttcc agatgtttct ggtgtttcca 1300
ggattccaag caggtctggt ccagcctctg attgtgtatc ggggcaagat 1350
ttgcacagta cagtgtatga agttattcag cacatccctg cccagcagca 1400
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tggaaacttt acattgttcg atttttcagc agactttgtt ttattaaatt 1850
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acaaaactat gccttctctt ttttttcaat caccagtagt atttttgaga 2000
agacttgatga acacttaagg aaatgactat taaagtctta tttttatttt 2050
tttcaaggaa agatggattc aaataaatta ttctgttttt gcttttaaaa 2100
aaaaaaaaa 2110

<210> 320
<211> 450
<212> PRT
<213> Homo Sapien

<400> 320
Met Trp Leu Lys Val Phe Thr Thr Phe Leu Ser Phe Ala Thr Gly
1 5 10 15
Ala Cys Ser Gly Leu Lys Val Thr Val Pro Ser His Thr Val His
20 25 30
Gly Val Arg Gly Gln Ala Leu Tyr Leu Pro Val His Tyr Gly Phe
35 40 45
His Thr Pro Ala Ser Asp Ile Gln Ile Ile Trp Leu Phe Glu Arg
50 55 60
Pro His Thr Met Pro Lys Tyr Leu Leu Gly Ser Val Asn Lys Ser
65 70 75
Val Val Pro Asp Leu Glu Tyr Gln His Lys Phe Thr Met Met Pro
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
80 85 90

Pro Asn Ala Ser	Leu 95	Leu Ile Asn Pro	Leu 100	Gln Phe Pro Asp	Glu 105
Gly Asn Tyr Ile	Val 110	Lys Val Asn Ile	Gln 115	Gly Asn Gly Thr	Leu 120
Ser Ala Ser Gln	Lys 125	Ile Gln Val Thr	Val 130	Asp Asp Pro Val	Thr 135
Lys Pro Val Val	Gln 140	Ile His Pro Pro	Ser 145	Gly Ala Val Glu	Tyr 150
Val Gly Asn Met	Thr 155	Leu Thr Cys His	Val 160	Glu Gly Gly Thr	Arg 165
Leu Ala Tyr Gln	Trp 170	Leu Lys Asn Gly	Arg 175	Pro Val His Thr	Ser 180
Ser Thr Tyr Ser	Phe 185	Ser Pro Gln Asn	Asn 190	Thr Leu His Ile	Ala 195
Pro Val Thr Lys	Glu 200	Asp Ile Gly Asn	Tyr 205	Ser Cys Leu Val	Arg 210
Asn Pro Val Ser	Glu 215	Met Glu Ser Asp	Ile 220	Ile Met Pro Ile	Ile 225
Tyr Tyr Gly Pro	Tyr 230	Gly Leu Gln Val	Asn 235	Ser Asp Lys Gly	Leu 240
Lys Val Gly Glu	Val 245	Phe Thr Val Asp	Leu 250	Gly Glu Ala Ile	Leu 255
Phe Asp Cys Ser	Ala 260	Asp Ser His Pro	Pro 265	Asn Thr Tyr Ser	Trp 270
Ile Arg Arg Thr	Asp 275	Asn Thr Thr Tyr	Ile 280	Ile Lys His Gly	Pro 285
Arg Leu Glu Val	Ala 290	Ser Glu Lys Val	Ala 295	Gln Lys Thr Met	Asp 300
Tyr Val Cys Cys	Ala 305	Tyr Asn Asn Ile	Thr 310	Gly Arg Gln Asp	Glu 315
Thr His Phe Thr	Val 320	Ile Ile Thr Ser	Val 325	Gly Leu Glu Lys	Leu 330
Ala Gln Lys Gly	Lys 335	Ser Leu Ser Pro	Leu 340	Ala Ser Ile Thr	Gly 345
Ile Ser Leu Phe	Leu 350	Ile Ile Ser Met	Cys 355	Leu Leu Phe Leu	Trp 360
Lys Lys Tyr Gln	Pro 365	Tyr Lys Val Ile	Lys 370	Gln Lys Leu Glu	Gly 375
Arg Pro Glu Thr	Glu 380	Tyr Arg Lys Ala	Gln 385	Thr Phe Ser Gly	His 390
Glu Asp Ala Leu	Asp	Asp Phe Gly Ile	Tyr	Glu Phe Val Ala	Phe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
395 400 405

Pro Asp Val Ser Gly Val Ser Arg Ile Pro Ser Arg Ser Val Pro
410 415 420

Ala Ser Asp Cys Val Ser Gly Gln Asp Leu His Ser Thr Val Tyr
425 430 435

Glu Val Ile Gln His Ile Pro Ala Gln Gln Gln Asp His Pro Glu
440 445 450

<210> 321

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 321

gacacctgtca caaagccagt ggtgc 25

<210> 322

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 322

cactgacagg gttcctcacc cagg 24

<210> 323

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 323

ctccctctgg gctgtggagt atgtggggaa catgaccctg acatg 45

<210> 324

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 324

gcaagcggcg aaatggcgcc ctccgggagt cttgcagttc ccctggcagt 50

cctggtgctg ttgctttggg gtgctccctg gacgcacggg cggcggagca 100

acgttcgcgt catcacggac gagaactgga gagaactgct ggaaggagac 150

tggtatgatag aatttttatgc cccgtggtgc cctgcttgtc aaaatcttca 200

accggaatgg gaaagttttg ctgaatgggg agaagatctt gaggttaata 250

ttgcgaaagt agatgtcaca gagcagccag gactgagtgg acggtttatc 300

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 gttctgatga gtagtatgtc agcactcttt cagctatcta tgtggatcag 500
 gacgtgccat aactacttta ttgaagacct tggattgcca gtgtggggat 550
 catatactgt ttttgcttta gcaactctgt tttccggact gttattagga 600
 ctctgtatga tatttgtggc agattgcctt tgtccttcaa aaaggcgcag 650
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 aacctttgaa aaaagtggag gaggaacaag aggcggatga agaagatgtt 750
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 aatttacatt tccaagtat tgcattattg aggtatttaa gaagattatt 1200
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 agaaatgtgt atttcagtga caatttcgtg gtcttttttag aggtatattc 1350
 caaaatttcc ttgtattttt aggttatgca actaataaaa actaccttac 1400
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 tttaggaagt ttttaagttc atggatttct cttgattcca acaaagtttg 1500
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 caaattggat gataatttct tggaaacatt ttttatgttt tagtaaacag 1600
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 tgttctttcc tgactggtaa tattgtgtgg gatttcacag gtaaaagtca 2050
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 ctgaccatta cgtagtagac aatttctgta atgtcccctt ctttctaggc 2200
 tctgttgctg tgtgaatcca ttagattttac agtatcgtaa tatacaagtt 2250
 ttcttttaaag ccctctcctt tagaatttaa aatattgtac cattaaagag 2300
 tttggatgtg taacttgtga tgccttagaa aaatatccta agcacaaaat 2350
 aaacctttct aaccacttca ttaaagctga aaaaaaaaaa aaaaaaa 2397

<210> 325

<211> 280

<212> PRT

<213> Homo Sapien

<400> 325

Met	Ala	Pro	Ser	Gly	Ser	Leu	Ala	Val	Pro	Leu	Ala	Val	Leu	Val	1	5	10	15
Leu	Leu	Leu	Trp	Gly	Ala	Pro	Trp	Thr	His	Gly	Arg	Arg	Ser	Asn	20	25	30	
Val	Arg	Val	Ile	Thr	Asp	Glu	Asn	Trp	Arg	Glu	Leu	Leu	Glu	Gly	35	40	45	
Asp	Trp	Met	Ile	Glu	Phe	Tyr	Ala	Pro	Trp	Cys	Pro	Ala	Cys	Gln	50	55	60	
Asn	Leu	Gln	Pro	Glu	Trp	Glu	Ser	Phe	Ala	Glu	Trp	Gly	Glu	Asp	65	70	75	
Leu	Glu	Val	Asn	Ile	Ala	Lys	Val	Asp	Val	Thr	Glu	Gln	Pro	Gly	80	85	90	
Leu	Ser	Gly	Arg	Phe	Ile	Ile	Thr	Ala	Leu	Pro	Thr	Ile	Tyr	His	95	100	105	
Cys	Lys	Asp	Gly	Glu	Phe	Arg	Arg	Tyr	Gln	Gly	Pro	Arg	Thr	Lys	110	115	120	
Lys	Asp	Phe	Ile	Asn	Phe	Ile	Ser	Asp	Lys	Glu	Trp	Lys	Ser	Ile	125	130	135	
Glu	Pro	Val	Ser	Ser	Trp	Phe	Gly	Pro	Gly	Ser	Val	Leu	Met	Ser	140	145	150	
Ser	Met	Ser	Ala	Leu	Phe	Gln	Leu	Ser	Met	Trp	Ile	Arg	Thr	Cys	155	160	165	
His	Asn	Tyr	Phe	Ile	Glu	Asp	Leu	Gly	Leu	Pro	Val	Trp	Gly	Ser	170	175	180	

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Tyr	Thr	Val	Phe	Ala	Leu	Ala	Thr	Leu	Phe	Ser	Gly	Leu	Leu	Leu
				185					190					195
Gly	Leu	Cys	Met	Ile	Phe	Val	Ala	Asp	Cys	Leu	Cys	Pro	Ser	Lys
				200					205					210
Arg	Arg	Arg	Pro	Gln	Pro	Tyr	Pro	Tyr	Pro	Ser	Lys	Lys	Leu	Leu
				215					220					225
Ser	Glu	Ser	Ala	Gln	Pro	Leu	Lys	Lys	Val	Glu	Glu	Glu	Gln	Glu
				230					235					240
Ala	Asp	Glu	Glu	Asp	Val	Ser	Glu	Glu	Glu	Ala	Glu	Ser	Lys	Glu
				245					250					255
Gly	Thr	Asn	Lys	Asp	Phe	Pro	Gln	Asn	Ala	Ile	Arg	Gln	Arg	Ser
				260					265					270
Leu	Gly	Pro	Ser	Leu	Ala	Thr	Asp	Lys	Ser					
				275					280					

<210> 326

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 326

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<210> 327

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 327

tatgtggatc aggacgtgcc 20

<210> 328

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 328

tgcagggttc agtctagatt g 21

<210> 329

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 329
ttgaaggaca aaggcaatct gccac 25

<210> 330
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 330
ggagtcttgc agttcccctg gcagtcctgg tgctgttgct ttggg 45

<210> 331
<211> 2168
<212> DNA
<213> Homo Sapien

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gaatctgcgg tactttgagc agttattgga ggaagagaga gaaaaaacgt 950
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aggcctgtgg actacctgcc tgagagggat gtttacgaga gcctctgtcg 1050

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 gttagctgtc tagcgcctag caaggctcct ttgtacctca ggtgttttag 2050
 gtgtgagatg tttcagtga ccaaagtctt gataccttgt ttacatgttt 2100
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 cctaccagaa aaaaaaaaa 2168

<210> 332
 <211> 533
 <212> PRT
 <213> Homo Sapien

<400> 332
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 1 5 10 15
 Leu Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met
 20 25 30
 Thr Asp Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys
 35 40 45
 Glu Tyr Ile Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser
 50 55 60

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Trp	Ala	Asn	Lys	Met	Glu	Ala	Leu	Thr	Ser	Lys	Ser	Ala	Ala	Asp	
				65					70					75	
Ala	Glu	Gly	Tyr	Leu	Ala	His	Pro	Val	Asn	Ala	Tyr	Lys	Leu	Val	
				80					85					90	
Lys	Arg	Leu	Asn	Thr	Asp	Trp	Pro	Ala	Leu	Glu	Asp	Leu	Val	Leu	
				95					100					105	
Gln	Asp	Ser	Ala	Ala	Gly	Phe	Ile	Ala	Asn	Leu	Ser	Val	Gln	Arg	
				110					115					120	
Gln	Phe	Phe	Pro	Thr	Asp	Glu	Asp	Glu	Ile	Gly	Ala	Ala	Lys	Ala	
				125					130					135	
Leu	Met	Arg	Leu	Gln	Asp	Thr	Tyr	Arg	Leu	Asp	Pro	Gly	Thr	Ile	
				140					145					150	
Ser	Arg	Gly	Glu	Leu	Pro	Gly	Thr	Lys	Tyr	Gln	Ala	Met	Leu	Ser	
				155					160					165	
Val	Asp	Asp	Cys	Phe	Gly	Met	Gly	Arg	Ser	Ala	Tyr	Asn	Glu	Gly	
				170					175					180	
Asp	Tyr	Tyr	His	Thr	Val	Leu	Trp	Met	Glu	Gln	Val	Leu	Lys	Gln	
				185					190					195	
Leu	Asp	Ala	Gly	Glu	Glu	Ala	Thr	Thr	Thr	Lys	Ser	Gln	Val	Leu	
				200					205					210	
Asp	Tyr	Leu	Ser	Tyr	Ala	Val	Phe	Gln	Leu	Gly	Asp	Leu	His	Arg	
				215					220					225	
Ala	Leu	Glu	Leu	Thr	Arg	Arg	Leu	Leu	Ser	Leu	Asp	Pro	Ser	His	
				230					235					240	
Glu	Arg	Ala	Gly	Gly	Asn	Leu	Arg	Tyr	Phe	Glu	Gln	Leu	Leu	Glu	
				245					250					255	
Glu	Glu	Arg	Glu	Lys	Thr	Leu	Thr	Asn	Gln	Thr	Glu	Ala	Glu	Leu	
				260					265					270	
Ala	Thr	Pro	Glu	Gly	Ile	Tyr	Glu	Arg	Pro	Val	Asp	Tyr	Leu	Pro	
				275					280					285	
Glu	Arg	Asp	Val	Tyr	Glu	Ser	Leu	Cys	Arg	Gly	Glu	Gly	Val	Lys	
				290					295					300	
Leu	Thr	Pro	Arg	Arg	Gln	Lys	Arg	Leu	Phe	Cys	Arg	Tyr	His	His	
				305					310					315	
Gly	Asn	Arg	Ala	Pro	Gln	Leu	Leu	Ile	Ala	Pro	Phe	Lys	Glu	Glu	
				320					325					330	
Asp	Glu	Trp	Asp	Ser	Pro	His	Ile	Val	Arg	Tyr	Tyr	Asp	Val	Met	
				335					340					345	
Ser	Asp	Glu	Glu	Ile	Glu	Arg	Ile	Lys	Glu	Ile	Ala	Lys	Pro	Lys	
				350					355					360	
Leu	Ala	Arg	Ala	Thr	Val	Arg	Asp	Pro	Lys	Thr	Gly	Val	Leu	Thr	
				365					370					375	

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Val	Ala	Ser	Tyr	Arg	Val	Ser	Lys	Ser	Ser	Trp	Leu	Glu	Glu	Asp
				380					385					390
Asp	Asp	Pro	Val	Val	Ala	Arg	Val	Asn	Arg	Arg	Met	Gln	His	Ile
				395					400					405
Thr	Gly	Leu	Thr	Val	Lys	Thr	Ala	Glu	Leu	Leu	Gln	Val	Ala	Asn
				410					415					420
Tyr	Gly	Val	Gly	Gly	Gln	Tyr	Glu	Pro	His	Phe	Asp	Phe	Ser	Arg
				425					430					435
Arg	Pro	Phe	Asp	Ser	Gly	Leu	Lys	Thr	Glu	Gly	Asn	Arg	Leu	Ala
				440					445					450
Thr	Phe	Leu	Asn	Tyr	Met	Ser	Asp	Val	Glu	Ala	Gly	Gly	Ala	Thr
				455					460					465
Val	Phe	Pro	Asp	Leu	Gly	Ala	Ala	Ile	Trp	Pro	Lys	Lys	Gly	Thr
				470					475					480
Ala	Val	Phe	Trp	Tyr	Asn	Leu	Leu	Arg	Ser	Gly	Glu	Gly	Asp	Tyr
				485					490					495
Arg	Thr	Arg	His	Ala	Ala	Cys	Pro	Val	Leu	Val	Gly	Cys	Lys	Trp
				500					505					510
Val	Ser	Asn	Lys	Trp	Phe	His	Glu	Arg	Gly	Gln	Glu	Phe	Leu	Arg
				515					520					525
Pro	Cys	Gly	Ser	Thr	Glu	Val	Asp							
				530										

<210> 333

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 333

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<210> 334

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 334

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<210> 335

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 335
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<210> 336
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<210> 337
<211> 45
<212> DNA
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<220>
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<210> 338
<211> 2789

<212> DNA
<213> Homo Sapien

<400> 338
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agacaggaca atcttcttgg ggatgctggt cctggaagcc agcgggcctt 200
gctctgtctt tggcctcatt gaccccaggt tctctggtta aaactgaaag 250
cctactactg gcctgggtgcc catcaatcca ttgatccttg aggctgtgcc 300
cctggggcac ccacctggca gggcctacca ccatgcgact gagctccctg 350
ttggctctgc tgcggccagc gcttcccctc atcttagggc tgtctctggg 400
gtgcagcctg agcctcctgc gggtttcctg gatccagggg gagggagaag 450
atccctgtgt cgaggctgta ggggagcgag gagggccaca gaatccagat 500
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cccctactac agggacccca acaagcccta caagaagggtg ctcaggactc 600
ggtacatcca gacagagctg ggctcccgtg agcggttgct ggtggctgtc 650
ctgacctccc gagctacact gtccactttg gccgtggctg tgaaccgtac 700
ggtggcccat cacttccctc ggttactcta cttcactggg cagcgggggg 750

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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gcctggctca tgtcagagac cctgcgccac cttcacacac actttggggc 850
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cccgcctggc agcccttgct ggccacctca gcatcaacca agacctgtac 950
ttaggccggg cagaggagt ctttggcgca ggcgagcagg cccggtactg 1000
tcattggggc tttggctacc tgtgtgcac gagtctcctg cttcgtctgc 1050
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cctgtctccg aaggtaccct catgtaccgg ctccacaaac gcttcagcgc 1300
tctggagttg gagcgggctt acagtgaat agaacaactg caggctcaga 1350
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cccgttggc tccctgctcc ttccacacca cactctcgct ttgaggtgct 1450
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cgggggctgg ccctgacccc cctccctc ctggtgctga cccctcccgg 2300
ggggctccta taggggggag atttgaccgg caggcttctg cggagggtg 2350

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 tggcaggcca ggaagaggag gaagccctgg aggggctgga ggtgatggat 2450
 gttttcctcc ggttctcagg gctccacctc tttcgggccc tagagccagg 2500
 gctggtgcag aagttctccc tgcgagactg cagcccacgg ctcagtgaag 2550
 aactctacca ccgctgccgc ctcagcaacc tggaggggct agggggccgt 2600
 gcccagctgg ctatggctct ctttgagcag gagcaggcca atagcactta 2650
 gcccgcctgg gggccctaac ctcattacct ttcctttgtc tgcctcagcc 2700
 ccaggaaggg caaggcaaga tggtgacag atagagaatt gttgctgtat 2750
 tttttaaata tgaaaatggt attaaacatg tcttctgcc 2789

<210> 339
 <211> 772
 <212> PRT
 <213> Homo Sapien

<400> 339
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 1 5 10 15
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 20 25 30
 Val Ser Trp Ile Gln Gly Glu Gly Glu Asp Pro Cys Val Glu Ala
 35 40 45
 Val Gly Glu Arg Gly Gly Pro Gln Asn Pro Asp Ser Arg Ala Arg
 50 55 60
 Leu Asp Gln Ser Asp Glu Asp Phe Lys Pro Arg Ile Val Pro Tyr
 65 70 75
 Tyr Arg Asp Pro Asn Lys Pro Tyr Lys Lys Val Leu Arg Thr Arg
 80 85 90
 Tyr Ile Gln Thr Glu Leu Gly Ser Arg Glu Arg Leu Leu Val Ala
 95 100 105
 Val Leu Thr Ser Arg Ala Thr Leu Ser Thr Leu Ala Val Ala Val
 110 115 120
 Asn Arg Thr Val Ala His His Phe Pro Arg Leu Leu Tyr Phe Thr
 125 130 135
 Gly Gln Arg Gly Ala Arg Ala Pro Ala Gly Met Gln Val Val Ser
 140 145 150
 His Gly Asp Glu Arg Pro Ala Trp Leu Met Ser Glu Thr Leu Arg
 155 160 165
 His Leu His Thr His Phe Gly Ala Asp Tyr Asp Trp Phe Phe Ile
 170 175 180
 Met Gln Asp Asp Thr Tyr Val Gln Ala Pro Arg Leu Ala Ala Leu
 185 190 195

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ala Gly His Leu Ser	Ile Asn Gln Asp	Leu Tyr Leu Gly Arg	Ala
200		205	210
Glu Glu Phe Ile Gly	Ala Gly Glu Gln	Ala Arg Tyr Cys His	Gly
215		220	225
Gly Phe Gly Tyr Leu	Leu Ser Arg Ser	Leu Leu Leu Arg Leu	Arg
230		235	240
Pro His Leu Asp Gly	Cys Arg Gly Asp	Ile Leu Ser Ala Arg	Pro
245		250	255
Asp Glu Trp Leu Gly	Arg Cys Leu Ile	Asp Ser Leu Gly Val	Gly
260		265	270
Cys Val Ser Gln His	Gln Gly Gln Gln	Tyr Arg Ser Phe Glu	Leu
275		280	285
Ala Lys Asn Arg Asp	Pro Glu Lys Glu	Gly Ser Ser Ala Phe	Leu
290		295	300
Ser Ala Phe Ala Val	His Pro Val Ser	Glu Gly Thr Leu Met	Tyr
305		310	315
Arg Leu His Lys Arg	Phe Ser Ala Leu	Glu Leu Glu Arg Ala	Tyr
320		325	330
Ser Glu Ile Glu Gln	Leu Gln Ala Gln	Ile Arg Asn Leu Thr	Val
335		340	345
Leu Thr Pro Glu Gly	Glu Ala Gly Leu	Ser Trp Pro Val Gly	Leu
350		355	360
Pro Ala Pro Phe Thr	Pro His Ser Arg	Phe Glu Val Leu Gly	Trp
365		370	375
Asp Tyr Phe Thr Glu	Gln His Thr Phe	Ser Cys Ala Asp Gly	Ala
380		385	390
Pro Lys Cys Pro Leu	Gln Gly Ala Ser	Arg Ala Asp Val Gly	Asp
395		400	405
Ala Leu Glu Thr Ala	Leu Glu Gln Leu	Asn Arg Arg Tyr Gln	Pro
410		415	420
Arg Leu Arg Phe Gln	Lys Gln Arg Leu	Leu Asn Gly Tyr Arg	Arg
425		430	435
Phe Asp Pro Ala Arg	Gly Met Glu Tyr	Thr Leu Asp Leu Leu	Leu
440		445	450
Glu Cys Val Thr Gln	Arg Gly His Arg	Arg Ala Leu Ala Arg	Arg
455		460	465
Val Ser Leu Leu Arg	Pro Leu Ser Arg	Val Glu Ile Leu Pro	Met
470		475	480
Pro Tyr Val Thr Glu	Ala Thr Arg Val	Gln Leu Val Leu Pro	Leu
485		490	495
Leu Val Ala Glu Ala	Ala Ala Ala Ala Pro	Ala Phe Leu Glu Ala	Phe
500		505	510

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

Ala Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu
515 520 525

Leu Leu Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp
530 535 540

Pro Phe Leu Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg
545 550 555

Tyr Pro Gly Thr Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala
560 565 570

Pro Ser Gln Val Arg Leu Met Asp Val Val Ser Lys Lys His Pro
575 580 585

Val Asp Thr Leu Phe Phe Leu Thr Thr Val Trp Thr Arg Pro Gly
590 595 600

Pro Glu Val Leu Asn Arg Cys Arg Met Asn Ala Ile Ser Gly Trp
605 610 615

Gln Ala Phe Phe Pro Val His Phe Gln Glu Phe Asn Pro Ala Leu
620 625 630

Ser Pro Gln Arg Ser Pro Pro Gly Pro Pro Gly Ala Gly Pro Asp
635 640 645

Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser Arg Gly Ala Pro Ile
650 655 660

Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu Gly Cys Phe Tyr
665 670 675

Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala Gly Glu Leu
680 685 690

Ala Gly Gln Glu Glu Glu Glu Ala Leu Glu Gly Leu Glu Val Met
695 700 705

Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg Ala Val
710 715 720

Glu Pro Gly Leu Val Gln Lys Phe Ser Leu Arg Asp Cys Ser Pro
725 730 735

Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu
740 745 750

Glu Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu
755 760 765

Gln Glu Gln Ala Asn Ser Thr
770

<210> 340

<211> 1572

<212> DNA

<213> Homo Sapien

<400> 340

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

tgtccccaag ccgttctaga cgcgggaaaa atgctttctg aaagcagctc 100
 ctttttgaag ggtgtgatgc ttggaagcat tttctgtgct ttgatcacta 150
 tgctaggaca cattaggatt ggtcatggaa atagaatgca ccaccatgag 200
 catcatcacc tacaagctcc taacaaagaa gatattctga aaatttcaga 250
 ggatgagcgc atggagctca gtaagagctt tcgagtatac tgtattatcc 300
 ttgtaaaacc caaagatgtg agtctttggg ctgcagtaaa ggagacttgg 350
 accaaacact gtgacaaagc agagtctctc agttctgaaa atgttaaagt 400
 gtttgagtca attaatatgg acacaaatga catgtgggta atgatgagaa 450
 aagcttaca atacgccttt gataagtata gagaccaata caactgggtc 500
 ttccttgac gccccactac gtttgctatc attgaaaacc taaagtattt 550
 tttgttaaaa aaggatccat cacagccttt ctatctaggc cacactataa 600
 aatctggaga cttgaatat gtgggtatgg aaggaggaat tgtcttaagt 650
 gtagaatcaa tgaaaagact taacagcctt ctcaatatcc cagaaaagt 700
 tcctgaacag ggagggatga tttggaagat atctgaagat aaacagctag 750
 cagtttgctt gaaatatgct ggagtatttg cagaaaatgc agaagatgct 800
 gatggaaaag atgtatttaa taccaaactt gttgggcttt ctattaaaga 850
 ggcaatgact tatcacccca accaggtagt agaaggctgt tgttcagata 900
 tggctgttac ttttaatgga ctgactccaa atcagatgca tgtgatgatg 950
 tatgggggat accgccttag ggcatttggg catattttca atgatgcatt 1000
 ggttttctta cctccaaatg gttctgacaa tgactgagaa gtggtagaaa 1050
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 gtaactacat atccaatata gctgtatgtt tctttttctt ttctaatttg 1150
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 ggggtggttt tttctttaaa acacatgaac attgtaaatg tgttggaag 1250
 aagtgtttta agaataataa ttttgcaa ataaactattaa taaatattat 1300
 atgtgataaa ttctaaatta tgaacattag aaatctgtgg ggcacatatt 1350
 tttgctgatt ggttaaaaaa ttttaacagg tcttttagcgt tctaagatat 1400
 gcaaatgata tctctagttg tgaatttggt attaaagtaa aacttttagc 1450
 tgtgtgttcc ctttacttct aatactgatt tatgttctaa gcctcccaa 1500
 gttccaatgg atttgccttc tcaaaatgta caactaagca actaaagaaa 1550
 attaaagtga aagttgaaaa at 1572

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 318

<212> PRT

<213> Homo Sapien

<400> 341

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Met Leu Ser Glu Ser Ser Ser Phe Leu Lys Gly Val Met Leu Gly
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Ser Ile Phe Cys Ala Leu Ile Thr Met Leu Gly His Ile Arg Ile
          20           25           30
Gly His Gly Asn Arg Met His His His Glu His His His Leu Gln
          35           40           45
Ala Pro Asn Lys Glu Asp Ile Leu Lys Ile Ser Glu Asp Glu Arg
          50           55           60
Met Glu Leu Ser Lys Ser Phe Arg Val Tyr Cys Ile Ile Leu Val
          65           70           75
Lys Pro Lys Asp Val Ser Leu Trp Ala Ala Val Lys Glu Thr Trp
          80           85           90
Thr Lys His Cys Asp Lys Ala Glu Phe Phe Ser Ser Glu Asn Val
          95          100          105
Lys Val Phe Glu Ser Ile Asn Met Asp Thr Asn Asp Met Trp Leu
          110          115          120
Met Met Arg Lys Ala Tyr Lys Tyr Ala Phe Asp Lys Tyr Arg Asp
          125          130          135
Gln Tyr Asn Trp Phe Phe Leu Ala Arg Pro Thr Thr Phe Ala Ile
          140          145          150
Ile Glu Asn Leu Lys Tyr Phe Leu Leu Lys Lys Asp Pro Ser Gln
          155          160          165
Pro Phe Tyr Leu Gly His Thr Ile Lys Ser Gly Asp Leu Glu Tyr
          170          175          180
Val Gly Met Glu Gly Gly Ile Val Leu Ser Val Glu Ser Met Lys
          185          190          195
Arg Leu Asn Ser Leu Leu Asn Ile Pro Glu Lys Cys Pro Glu Gln
          200          205          210
Gly Gly Met Ile Trp Lys Ile Ser Glu Asp Lys Gln Leu Ala Val
          215          220          225
Cys Leu Lys Tyr Ala Gly Val Phe Ala Glu Asn Ala Glu Asp Ala
          230          235          240
Asp Gly Lys Asp Val Phe Asn Thr Lys Ser Val Gly Leu Ser Ile
          245          250          255
Lys Glu Ala Met Thr Tyr His Pro Asn Gln Val Val Glu Gly Cys
          260          265          270
Cys Ser Asp Met Ala Val Thr Phe Asn Gly Leu Thr Pro Asn Gln
          275          280          285
Met His Val Met Met Tyr Gly Val Tyr Arg Leu Arg Ala Phe Gly

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
290 295 300

His Ile Phe Asn Asp Ala Leu Val Phe Leu Pro Pro Asn Gly Ser
305 310 315

Asp Asn Asp

<210> 342

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 342

tccccaagcc gttctagacg cgg 23

<210> 343

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 343

ctggttcttc cttgcacg 18

<210> 344

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 344

gcccaaatgc cctaaggcgg tataacccc 28

<210> 345

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 345

gggtgtgatg cttggaagca ttttctgtgc tttgatcact atgctaggac 50

<210> 346

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 346

gggatgcagg tggtgtctca tgggg 25

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 347
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic Oligonucleotide Probe

 <400> 347
 ccctcatgta ccggctcc 18

 <210> 348
 <211> 48
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 <400> 348
 ggattctaatacgcactcactataggggtcagaaaagcgcaacagagaa 48

 <210> 349
 <211> 47
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 <400> 349
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 <210> 350
 <211> 48
 <212> DNA
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 <400> 350
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 <210> 351
 <211> 48
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 <400> 351
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 <210> 352
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 <213> Artificial Sequence

 <220>
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<210> 353
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 353
ctatgaaatt aaccctcact aaagggacgg gggacaccac ggaccaga 48

<210> 354
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 354
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<220>
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<210> 356
<211> 46
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<220>
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<400> 356
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<210> 357
<211> 48
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<220>
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<400> 357
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<210> 358
<211> 47
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>

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<400> 358

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<210> 359

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 359

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<210> 360

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 360

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<210> 361

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 361

ctatgaaattaacctcactaaaggagggtacaattaagggtggat 48

<210> 362

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 362

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<210> 363

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 363

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<210> 364

<211> 47

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 364
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<210> 365
<211> 48
<212> DNA
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<220>
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<400> 365
ctatgaaattaacctcactaaagggagtggtggccgcgattatctgc48

<210> 366
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 366
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<210> 367
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 367
ctatgaaattaacctcactaaagggacagacggggcagagggagtg47

<210> 368
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 368
ggattctaatacgcactcactatagggccagaggcgtagagagaaac47

<210> 369
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 369

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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
ctatgaaatt aaccctcact aaagggaaag acatgtcatc gggagtgg 48

<210> 370

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 370

ggattctaatt acgactcact atagggccgg gtggaggtgg aacagaaa 48

<210> 371

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 371

ctatgaaatt aaccctcact aaagggacac agacagagcc ccatacgc 48

<210> 372

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 372

ggattctaatt acgactcact atagggccag ggaaatccgg atgtctc 47

<210> 373

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 373

ctatgaaatt aaccctcact aaagggagta aggggatgcc accgagta 48

<210> 374

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 374

ggattctaatt acgactcact atagggccag ctacccgcag gaggagg 47

<210> 375

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 <223> Synthetic Oligonucleotide Probe

<400> 375
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<210> 376
 <211> 997
 <212> DNA
 <213> Homo Sapien

<400> 376
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 agggagggag agaaaaagag agagagagaa acaaaaaacc aaagagagag 100
 aaaaaatgaa ttcattctaaa tcattctgaaa cacaatgcac agagagagga 150
 tgctttctctt cccaaatggtt cttatggact gttgctggga tccccatcct 200
 attttctcagt gcctgtttca tcaccagatg tgttgtgaca tttcgcattct 250
 ttcaaacctg tgatgagaaa aagtttcagc tacctgagaa tttcacagag 300
 ctctcctgct acaattatgg atcagggttca gtcaagaatt gttgtccatt 350
 gaactgggaa tatttttcaat ccagctgcta cttcttttct actgacacca 400
 tttcctgggc gttaagttaa aagaactgct cagccatggg ggctcacctg 450
 gtggttatca actcacagga ggagcaggaa ttcctttcct acaagaaacc 500
 taaaatgaga gagtttttta ttggactgtc agaccagggt gtcgagggtc 550
 agtggcaatg ggtggacggc acaccttga caaagtctct gagcttctgg 600
 gatgtagggg agcccaacaa catagctacc ctggaggact gtgccaccat 650
 gagagactct tcaaacccaa ggcaaaattg gaatgatgta acctgtttcc 700
 tcaattattt tcggatttgt gaaatggtag gaataaatcc tttgaacaaa 750
 ggaaaatctc tttaagaaca gaaggcacia ctcaaattgtg taaagaagga 800
 agagcaagaa catggccaca cccaccgccc cacacgagaa atttgtgcgc 850
 tgaacttcaa aggacttcat aagtatttgt tactctgata caaataaaaa 900
 taagtagttt taaatgttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 997

<210> 377
 <211> 219
 <212> PRT
 <213> Homo Sapien

<400> 377
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 1 5 10 15
 Cys Phe Ser Ser Gln Met Phe Leu Trp Thr Val Ala Gly Ile Pro
 20 25 30

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 Ile Leu Phe Leu Ser Ala Cys Phe Ile Thr Arg Cys Val Val Thr
 35 40 45

Phe Arg Ile Phe Gln Thr Cys Asp Glu Lys Lys Phe Gln Leu Pro
 50 55 60

Glu Asn Phe Thr Glu Leu Ser Cys Tyr Asn Tyr Gly Ser Gly Ser
 65 70 75

Val Lys Asn Cys Cys Pro Leu Asn Trp Glu Tyr Phe Gln Ser Ser
 80 85 90

Cys Tyr Phe Phe Ser Thr Asp Thr Ile Ser Trp Ala Leu Ser Leu
 95 100 105

Lys Asn Cys Ser Ala Met Gly Ala His Leu Val Val Ile Asn Ser
 110 115 120

Gln Glu Glu Gln Glu Phe Leu Ser Tyr Lys Lys Pro Lys Met Arg
 125 130 135

Glu Phe Phe Ile Gly Leu Ser Asp Gln Val Val Glu Gly Gln Trp
 140 145 150

Gln Trp Val Asp Gly Thr Pro Leu Thr Lys Ser Leu Ser Phe Trp
 155 160 165

Asp Val Gly Glu Pro Asn Asn Ile Ala Thr Leu Glu Asp Cys Ala
 170 175 180

Thr Met Arg Asp Ser Ser Asn Pro Arg Gln Asn Trp Asn Asp Val
 185 190 195

Thr Cys Phe Leu Asn Tyr Phe Arg Ile Cys Glu Met Val Gly Ile
 200 205 210

Asn Pro Leu Asn Lys Gly Lys Ser Leu
 215

<210> 378

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 378

ttcagcttct gggatgtagg g 21

<210> 379

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 379

tattcctacc atttcacaaa tccg 24

<210> 380

<211> 49

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<212> DNA
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 <220>
 <223> synthetic oligonucleotide probe

 <400> 380
 ggaggactgt gccaccatga gagactcttc aaaccaagg caaaattgg 49

 <210> 381
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic oligonucleotide probe

 <400> 381
 gcagattttg aggacagcca cctcca 26

 <210> 382
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic oligonucleotide probe

 <400> 382
 ggccttgag acaaccgt 18

 <210> 383
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic oligonucleotide probe

 <400> 383
 cagactgagg gagatccgag a 21

 <210> 384
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic oligonucleotide probe

 <400> 384
 cagctgccct tccccaacca 20

 <210> 385
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> synthetic oligonucleotide probe

 <400> 385
 catcaagcgc ctctacca 18

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 386
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide probe

<400> 386
cacaaactcg aactgcttct g 21

<210> 387
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide probe

<400> 387
gggccatcac agctccct 18

<210> 388
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide probe

<400> 388
gggatgtggt gaacacagaa ca 22

<210> 389
<211> 22

<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide probe

<400> 389
tgccagctgc atgctgccag tt 22

<210> 390
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide probe

<400> 390
cagaaggatg tcccgtggaa 20

<210> 391
<211> 17
<212> DNA
<213> Artificial Sequence

<220>

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<223> synthetic oligonucleotide probe

<400> 391
gccgctgtcc actgcag 17

<210> 392

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 392
gacggcatcc tcagggccac a 21

<210> 393

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 393
atgtcctcca tgcccacgcg 20

<210> 394

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 394
gagtgcgaca tcgagagctt 20

<210> 395

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 395
ccgcagcctc agtgatga 18

<210> 396

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 396
gaagagcaca gctgcagatc c 21

<210> 397

<211> 22

<212> DNA

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 397

gaggtgtcct ggcttttgta gt 22

<210> 398

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 398

cctctggcgc cccactcaa 20

<210> 399

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 399

ccaggagagc tggcgatg 18

<210> 400

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 400

gcaaattcag ggctcactag aga 23

<210> 401

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 401

cacagagcat ttgtccatca gcagttcag 29

<210> 402

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide probe

<400> 402

ggcagagact tccagtcact ga 22

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<210> 403
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 403
 gccaaagggtg gtgttagata gg 22

 <210> 404
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 404
 caggccccct tgatctgtac ccca 24

 <210> 405
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 405
 gggacgtgct tctacaagaa cag 23

 <210> 406
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 406
 caggcttaca atgttatgat cagaca 26

 <210> 407
 <211> 31
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 407
 tattcagagt tttccattgg cagtgccagt t 31

 <210> 408
 <211> 21
 <212> DNA
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 <220>
 <223> Synthetic oligonucleotide probe

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<400> 408
tctacatcag cctctctgcg c 21

<210> 409
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 409
cgatcttctc cacccaggag cgg 23

<210> 410
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 410
gccaggcctc acattcgt 18

<210> 411
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 411
ctccctgaat ggcagcctga gca 23

<210> 412
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 412
aggtgtttat taaggccta cgct 24

<210> 413
<211> 19
<212> DNA
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<220>
<223> Synthetic oligonucleotide probe

<400> 413
cagagcagag ggtgccttg 19

<210> 414
<211> 21
<212> DNA
<213> Artificial Sequence

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<220>
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<400> 414
tggcggagtc ccctcttggc t 21

<210> 415
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<220>
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<400> 415
ccctgtttcc ctatgcatca ct 22

<210> 416
<211> 21
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<213> Artificial Sequence

<220>
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<400> 416
tcaacccttg accctttcct a 21

<210> 417
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide probe

<400> 417
ggcaggggac aagccatctc tcct 24

<210> 418
<211> 20
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<220>
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<400> 418
gggactgaac tgccagcttc 20

<210> 419
<211> 22
<212> DNA
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<220>
<223> synthetic oligonucleotide probe

<400> 419
gggccctaac ctcattacct tt 22

<210> 420

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 420

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<210> 421

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 421

tctgtccacc atcttgcctt g 21

<210> 422

<211> 3554

<212> DNA

<213> Homo Sapien

<400> 422

gggactacaa gccgcgccgc gctgccgctg gcccctcagc aaccctcgac 50
atggcgctga ggcggccacc gcgactccgg ctctgcgctc ggctgcctga 100
cttcttctctg ctgctgcttt tcaggggctg cctgataggg gctgtaaatc 150
tcaaatccag caatcgaacc ccagtggtag aggaatttga aagtgtggaa 200
ctgtcttgca tcattacgga ttcgcagaca agtgacccca ggatcgagtg 250
gaagaaaatt caagatgaac aaaccacata tgtgtttttt gacaacaaaa 300
ttcagggaga cttggcgggt cgtgcagaaa tactggggaa gacatccctg 350
aagatctgga atgtgacacg gagagactca gccctttatc gctgtgaggt 400
cgttgctcga aatgaccgca aggaaattga tgagattgtg atcgagttaa 450
ctgtgcaagt gaagccagtg acccctgtct gtagagtgcc gaaggctgta 500
ccagtaggca agatggcaac actgcactgc caggagagtg agggccaccc 550
ccggcctcac tacagctggt atcgcaatga tgtaccactg cccacggatt 600
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acaggcactt tgggtgttcac tgctgttcac aaggacgact ctgggcagta 700
ctactgcatt gcttccaatg acgcaggctc agccagggtg gaggagcagg 750
agatggaagt ctatgacctg aacattggcg gaattattgg gggggttctg 800
gttgtccttg ctgtactggc cctgatcacg ttgggcatct gctgtgcata 850
cagacgtggc tacttcatca acaataaaca ggatggagaa agttacaaga 900

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
accagggaa accagatgga gttactaca tccgactga cgaggagggc 950

gacttcagac acaagtcacg gtttgtgac tgagacccgc ggtgtggctg 1000
agagcgcaca gagcgcacgt gcacatacct ctgctagaaa ctctgtcaa 1050
ggcagcgaga gctgatgcac tcggacagag ctagacactc attcagaagc 1100
ttttcgtttt ggccaaagt gaccactact cttcttactc taacaagcca 1150
catgaataga agaattttcc tcaagatgga cccggtaaata ataaccacaa 1200
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tattttgatt attgaaaaga aaatttctat ttaaactgta aatatattgt 1800
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aagttccaag ctactagtgt taaattggaa aatatcaata attaagagta 1900
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CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt

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 cccactgttc ctcttttgcca cagagaaagc acccagacgc cacaggctct 2600
 gtcgcatttc aaaacaaacc atgatggagt ggcggccagt ccagcctttt 2650
 aaagaacgtc aggtggagca gccagggtgaa aggcctggcg gggaggaaaag 2700
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 gcctttggat ggatgttgct gtacacagat gctacagact tgtactaaca 3500
 caccgtaatt tggcatttgt ttaacctcat ttataaaagc ttcaaaaaaa 3550
 ccca 3554

<210> 423
 <211> 310
 <212> PRT
 <213> Homo Sapien

<400> 423
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 Pro Asp Phe Phe Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly
 20 25 30
 Ala Val Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu
 35 40 45
 Phe Glu Ser Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr
 50 55 60

CORRECTED SEQUENCE LISTING FROM 10466.14 01.29.02P1618P2C1.txt
 Ser Asp Pro Arg Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr
 65 70 75

Thr Tyr Val Phe Phe Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly
 80 85 90

Arg Ala Glu Ile Leu Gly Lys Thr Ser Leu Lys Ile Trp Asn Val
 95 100 105

Thr Arg Arg Asp Ser Ala Leu Tyr Arg Cys Glu Val Val Ala Arg
 110 115 120

Asn Asp Arg Lys Glu Ile Asp Glu Ile Val Ile Glu Leu Thr Val
 125 130 135

Gln Val Lys Pro Val Thr Pro Val Cys Arg Val Pro Lys Ala Val
 140 145 150

Pro Val Gly Lys Met Ala Thr Leu His Cys Gln Glu Ser Glu Gly
 155 160 165

His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn Asp Val Pro Leu
 170 175 180

Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn Ser Ser Phe
 185 190 195

His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala Val His
 200 205 210

Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp Ala
 215 220 225

Gly Ser Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu
 230 235 240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val
 245 250 255

Leu Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly
 260 265 270

Tyr Phe Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro
 275 280 285

Gly Lys Pro Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly
 290 295 300

Asp Phe Arg His Lys Ser Ser Phe Val Ile
 305 310